STIC-Biotech/ChemLib

From:

Chan, Christina

Sent:

Thursday, May 27, 2004 12:18 PM Schnizer, Holly; STIC-Biotech/ChemLib

To: Subject:

RE: Request for RUSH sequence search in Appl. no. 09/902772

Please rush. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 & 1642 (571)-272-0841 Remsen, 3E89

----Original Message----

From:

Schnizer, Holly

Sent: To:

Thursday, May 27, 2004 12:14 PM

Chan, Christina

Subject:

Request for RUSH sequence search in Appl. no. 09/902772

I would like to request a RUSH sequence search for the sequences below in the above appl. which is an after-final.

Please search all databases for

SEQ ID NO:1

reverse translation of SEQ ID NO:2.

Thank you.

Holly Schnizer AU 1653 Office: REM 3C79 Mailbox: REM 3C70 (571)272-0958

Searcher:
Phone:
Location:
Date Picked Up:
Date Completed: 5/28
Searcher Prep/Review:
Clerical:
Online time:

TYPE OF SEARCH:
NA Sequences:
AA Sequences:
Structures:
Bibliographic:
Litigation:
Full text:
Patent Family:
Other

VENDOR/COST (where applic.)
STN:
DIALOG:
Questel/Orbit:
DRLink:
Lexis/Nexis:
Sequence Sys.:
WWW/Internet:
Other (specify):

```
May 27, 2004, 16:28:06; Search time 5814 Seconds (without alignments) 10787.301 Million cell updates/sec
                                                                                                          US-09-902-772-1
1447
1 gaattccgcgaacgaataat.....gaaagaaagcgccaagaaa 1447
                                                                                                                                                                                                               6940544
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                      3470272 seqs, 21671516995 residues
                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                           OM nucleic - nucleic search, using sw model
                                                                                                                                                      IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_v1:*
em_htg.hum:*
em_htg_inn:*
em_htg_inn:*
em_htg_other:*
em_htg_pln:*
em_htg_pln:*
em_htg_rod:*
em_htg_vrt:*
em_htg_vrt:*
em_htg_vrt:*
em_htg_omus:*
em_htgo_other:*
                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                GenEmbl:*
                                                                                                           Title:
Perfect score:
Sequence:
                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                         Searched:
                                                                  Run on:
```

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	criptio	rotein. Galliu Seque	linear PAT 18-JUN-2001 ry activity and gene
SUMMAKIES	рв ір	E31253 5 AY06561 6 B31254 9 BCG40168 9 BCG40168 10 AM567228 10 AM567307 10 AB073078 110 AB073078 110 AB073078 110 AB073079 110 AB073079 110 AB073079 110 AB073079 111 AB073079 111 AB073079 112 AX657230 112 AX657230 113 AX657230 113 AX657230 114 AX657230 115 AX657230 115 AX657230 116 AX657230 117 AX657230 117 AX657230 118 AX667230 118 AX66	1447 bp DNA 11 calcifying inhibito 5685 47) inobu, H., Marijio, P.,
•	Query Match Length	0.00	E31253 Protein having cell encoding the same. E31253.1 GI:13025 UP 199075871-A/1. Unidentified
	Result No. Score	1	RESULT 1 E31253 LOCUS E3 DEFINITION PT ACCESSION E3 VERYWORDS UN SOURCE ORGANISM UN REFERENCE 1 AUTHORS Hi TITLE PT FOR

May

Fri

```
GI:17887440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441 AAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY065661.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1381
                                                                                                                                                    841
                                                                                                                                                                                                               961
                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                 1201
                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                    721
                                                                                                            781
                                                                                                                                841
                                                                                                                                                                        901
                            661
                                                 721
                                                                                        781
         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
AY065661
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                     6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                            g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                         ò
          상 음
                                           ઠે
                                                                 8
                                                                                        ò
                                                                                                       g
                                                                                                                               ò
                                                                                                                                              셤
                                                                                                                                                                  à
                                                                                                                                                                                                         ठ
                  PENNSYLVANIA
OS Unidentified
PD 23-MAR-1999
PD 23-MAR-1999
PD 23-MAR-1999
PF 29-MAY-1998 US 60/050297 PI
HIROYAGU IMAMOTO, YOSHINOBU HIGUCHI, MARIJIO PASHIFIKI, PI JOEL
ROZENBUROOM,
PI HELENA E
PC C12N15/09, A61K48/00, C07K14/465, C07K16/18, C12Q1/68//A61K38/00,
PC C12P21/08, C12N15/00, A61K37/02
CC Strandedness: Single,
CC Topology: Linear;
PH Key
CT Topology: Linear;
PH Key
CT Topology: Linear;
PT Source
C Topology: Linear;
FT Source
C Topology: Linear;
FT Source
C Topology: Linear;
FT Source
C C Topology: Linear;
FT Source
                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                       HELELL, R
HELENA, B
C12N15/09, A61K48/00, CO7K14/465, CO7K16/18, C12Q1/68//A61K38/00,
C12P21/08, C12N15/00, A61K37/02
Strandedness: Single,
Topology: Linear,
Key
                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGAACATTGATGGGAAAGATTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA TCCAGAACATTGATGGGAAAGATTGTGTGTAAAATGACCAAAGATGACTTCCAGAAGATTGTTGTATAAATGACCAAAGATGACTTCCAGAAGATTGT
                                                                                                                                                                                                                                                                                                                                                 CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAATGAACGAAGATTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                      AGTGTGCCTACGGATCGCCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                 AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCGGCCAGATTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAGTGGAGTGGGCCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCAGTGGCTGGAGTGGGGCAGTGAAGGAGTATGGTCTTCCAGACGAGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                           GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                      Gaps
          Q
                                                                                                                                                                                                                                                                                      ô
23-MAR-1999;
HE TRUSTEES OF THE UNIVERSITY
                                                                                                                                                                                                                                                                    DB 6; Length 1447;
                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                       urce 1..1447

Location/Qualifiers
1..1447

Organism='Unidentified'.
Corganism="Unidentified"
mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 1447; Best Local Similarity 100.0%; Pred. No. 0; Matches 1447; Conservative 0; Mismatches
Patent: JP 1999075871-A 1 CHUGAI PHARMACEUT CO LTD,
                                                                                                                                                                                                                                                                                                                                н
                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                           ч
                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
 JOURNAL
                                                                                                                                                                                              PEATURES
                              COMMENT
                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
2
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

1380 1440 AY065661 1413 bp mRNA linear VRT 17-DEC-2001 Gallus gallus erg isoform C-1-1 mRNA, complete cds; alternatively spliced. AY065661 1140 1260 1260 1320 1320 1380 1020 1020 1080 1080 1140 1200 1200 960 840 900 960 720 780 780 840 900 720 Craniata; Vertebrata; Euteleostomi; Galliformes; Phasianidae; Enomoto-Iwamoto, M., Kurisu, K. 1261 TGAACTITGTAGCTCCCCATCCCCTGCTITGCCCGTAACCTCATCCAGCTTTTTTAGCTG CCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAG ACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGG CACTICGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGTTATGCCT TGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGA TGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTG CTCAGTCAAAAGCTACCCAACCATCTTCAACAGGTGCCCCAAACAGAAGACCAGCGTC 901 GIGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACACAGCTCCAACTCCA CTCGGCGTTGGGGAAAAAGGAAAACCTAACATGAACTATGACAAACTCAGGCGGTG CCACTTTTATTTTTCCAAATACATCAGTTTACCCCAGAAGCAACGCAAAGAATAACAACAA CTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAAACAGAAGACCAGCGTC CTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAATCCAGGGA GTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCA GGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA CICAGITAGAICCITAICAGAITCITGGACCGACCAGCCGICITGCAAAICCAGGGA ന

us-09-902-772-1.rge

```
1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      p DNA linear PAT 18-JUN-2001
inhibitory activity and gene
                               480
                                                                        566
                                                                                                              540
                                                                                                                                                    626
                                                                                                                                                                                             600
                                                                                                                                                                                                                                   989
                                                                                                                                                                                                                                                                       099
                                                                                                                                                                                                                                                                                                               746
                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                          806
                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021 AAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141 CAGGCCTCCAGCCTCACCTCCAGAATCATCCATGTACAATAGCCATCAGACCTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1261 GCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCA
                                                                                               GAGTATGGTCTTCCAGACGTGGACATCTTGTTCCAGAAACATTGATGGGAAAGAGTTG
                                                                                                                                                                              CIGICACACCTACACCICAGAGAGAGAGAGCCACTITIAITTTTCCAAATACATCA
                                                                                                                                                                                                                                                                                                                                       GTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTCAACAGTGCCCAAAACAGAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGCCACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGGAGTTCAAGATGACACACTCATGATGAAGTGGCTCGGCGTTGGGAGAGAAGAAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTATGACTAAAGTTCATGGTAAACGCTATGCCTACAATTTCATTTCCACGGAATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081 ATTATGACTAAAGTTCATGGTAAAGGCTATGCCTACAAATTTGATTTCCACGGAATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGCCCTCCAGCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTGCCCCGTAACCTCATCCAGCTTTTTGCTGCCCCTAATCCATACTGGAATTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1347 ACTGGAGGCATCTACCCAATACCAGGCTGCTGCTCATATGCCTTCCCATCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321 ACTGGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGC
                       421 GCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGAGTGGGCAGTGAAG
                                                                                                                                                         TGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAACGCAGATATCCTC
                                                                                                                                                                                                                                                        CIGICACACCTACACTCAGAGAGAGAGAGGAGCCACTTTTATTTTTCCAAATACATCA
                                                                                                                                                                                                                                                                                                       GITTACCCAGAAGCAACGCAAAGAATAACAACAAGGCCAGAITTACCITAIGAGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                            AGGAGATCAGCGTGGACGAGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTCAACAGTGCCCAAAACAGAAGACCAGCTCCTCAGTTAGATCCTTATCAGATTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACCGACCAGCAGCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCT
GCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGAGTGGGCAGTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTACTACTAAGTGGGGAAAGAAAGAAA 1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCTACTACTAGGGGGAAAGAAAAAA 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1528 bp
cell calcifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E31254
Protein having
                                                                            GAGTATGGTCTT
                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                         267
                                                                                                                                                                                                                                     627
                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                    687
                                                                                                                                                                                                                                                                                                                                                                                                747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
  447
                                                                                                                481
                                                                            507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
E31254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                           g
                                                               ò
                                                                                                          qq
                                                                                                                                                      ò
                                                                                                                                                                                        음
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                 දු පු
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                   8 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / ACCIONATE ALL ALLA SELECTION OF THE STATE 
Yeh,H., Abrams,W.R., Rosenbloom,J. and Pacifici,M.
Transcription factor ERG variants and functional diversification of
Chondrocytes during limb long bone development
J. Cell Biol. 150 (1), 27-40 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                     11680687

3 (Dasses 1 to 1413)

Iwamoto, M., Higuchi, Y., Yeh, H. and Pacifici, M.

Direct Submission

Submitted (05-DEC-2001) Oral Anatomy and Developmental Biology,

Osaka University Faculty of Dentistry, 1-8 Yamadaoka, Suita, Osaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGGAGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTATGGAAGCTACATG 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGGGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGTTACCATTAAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGACTGCAGCGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGGATCGCCCCACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGGGGAAACATCAAAGATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAAAGACAGAAATGACAGCCTCCTCTCCAGTGAATATGGGCAAACATCAAAGATGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGTTACCATTAAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGACTGCAGCGTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAGGAGTTATTGTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAGGAGTATTGTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTATCAGTGGTGAAGACCAGTCCTTGTTTGAGTGTCCTACGGATCGCCCCACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGCAATTATTAGCGATCAATAATCTTGATCACATTATGGCAAGCACTATTAAGGAAGCA
                                                                                                      1 (bases 1 to 1413)
Iwamoto,M., Higuchi,Y., Enomoto-Iwamoto,M., Kurisu,K., Koyama, Yeh,H., Rosenbloom,J. and Pacifici,M.
The role of ERG (ets related gene) in cartilage development Ostecoarthr. Cartil. 9 Suppl A, S41-S47 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="alternatively spliced; transcription factor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 5, Length 1413;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.4%; Score 1409; D
100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Gallus gallus"
/mol_type="mRNA"
/db_xref="taxon:9031"
37._.1392
                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                          565-0871, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
les 1409; Conserv
                                                                                                   10893254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches 1
                                                                                                                                                                          TITLE
JOURNAL
MEDLINE
                                                                                                                                                                                                                                     PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                            MEDLINE
PUBMED
                                                                                                                                        AUTHORS
                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

6 6 6 6 6 6 6 6 6 6

음

ò

```
1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1180
                                                                                                                                  601
                                                                                                                                                               601
                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                             700
                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        940
                                                                    541
                                                                                                 541
                                                                                                                                                                                                 655
                                                                                                                                                                                                                                                               655
                                                                                                                                                                                                                                                                                                                                                                                              760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 %
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                           qq
                                                             8 & 8 &
                                                                                                                                                                                     g
S
                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                             NBUROOM,
HELENA B
HELENA B
C127215/09, AGIK48/00, C07K14/465, C07K16/18, C12Q1/68//AGIK38/00,
C12721/02,
C12721/08, C12N15/00, AGIK37/02
S1randedness: Single;
Topology: Linear;
encoding the same.

B 21254

B 31254

B 41205831-A/2.

B 52 Actal: 10 1528)

B 42 B 199075871-A/2

B 52 B 199075871-A/2

B 53 AAR-1999

B 60/050297

B 72 B 1991700, CO7K14/465, CO7K16/18, C12Q1/68/A61X38/00

C C12P21/08, C12N15/09, A61K37/02

C C Strandedness: Single,

C Topology: Linear;

F 7 Caraledness: Single,

C Topology: Linear;

F 8 Caraledness: Single,

C Topology: Linear;

F 8 Caraledness: Single,

C Topology: Linear;

F 8 Caraledness: Single,

C Topology: Linear;

F 7 Caraledness: Single,

C Topology: Linear;

F 8 Caraledness: Single,

C Topology: Linear;

F 7 Caraledness: Single,

C Topology: Linear;

C Topology: Linear;

F 7 Caraledness: Single,

C Topology: Linear;

C Topology:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATGGCAAGCACTATTAAGGAAGCATTATCAGTGGTGGTGAGAGACCAGTCCTTGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATTCCGCGAACGAATAATTATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGGCAAGCACTATTAAGGAAGCATTATCAGTGGAGTGAAGACCAGTCCTTGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANTHIGGGCAAACATCAAAGATGAGCCCCCGCCCCCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6; Length 1528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Vocation/Qualifiers

1. 1528

1. 1528

1. 1528

7. organism='Unidentified'.

1. 1528

7. organism='unidentified''

//organism='unidentified''

//mol_type="genomic DNA"

/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.7%; Pred. No. 0;
Matches 1447; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \stackrel{\sim}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \dot{\delta}
```

1320 1380 1059 1140 1119 1200 1179 1239 1359 1419 1020 1080 666 900 900 999 654 669 780 759 840 819 900 879 960 654 540 ACTATGACABACTCAGCCGTGCACTTCGCTACTATGACABAAATATTATGACTAAAG 1321 ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAA TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA CGCCGAGCTATAACGCAGATATCCTCTGTCACACCTACACTACACTACTCTCTC ATGCTAGAAACACAGGAGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAG GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC 961 GCCGTCTTGCAAATCCAGGGAGTGGGCACATACAGCTATGGCAGTTCCTACTGGAGCTTC TGTCGGACAGCTCCCAACTCCAACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGA 1081 TGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGGAGGAAAAGCAAACCTAACATGA TTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGC CTCACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT CCTCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCT 1360 ACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAAG GGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT 481 GGCAGTGGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA CGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA-----TTCCACATTTGACTTCAGATGATGATGATAAGGCCTTACAAAACTCTCCACGGTTAATGC -------GAGGAGCCACTTTTTTTCCAAATACATCAGTTTACCCAGAAG CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGGATCAGCGT CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGGAGTCAGGG GGACGAGTCACAGCCATCCCACTCAGAAAGCTACCCAACCATCATCTTCAACAGTGC TGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGGAGTTCAAGA 1240 ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCCTAA 1420 TGGGGAAAGAAAGAAAGCGCCAAGAAAA 1447

```
361
                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1120
                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1180
                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          700
                                                                                                                            301
                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   655
                                                  g
                                                                                         \dot{\delta}
                                                                                                                   업
                                                                                                                                                  ઠે
                                                                                                                                                                                        В
                                                                                                                                                                                                                    8 6
                                                                                                                                                                                                                                                                                            के वि के
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                              à g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .1516
| organism="Gallus gallus"
| wol_type="msmxn" |
| wol_tope="msmxn" |
| wol_tope="msm
                                        VRT 27-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATGGCAAGCACTATTAAGGAAGCATTATCAGTGGTGAAGACCAGTCCTTGTTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATGGCAAGCACTATTAAGGAAGCATTATCAGTGGTGAAGACCAGTCCTTGTTTG 120
                                                                                                    ERG gene.
Gallus gallus (chicken)
Gallus gallus
Eukaryotz, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 1516)
Duterque-Coquillaud, M.
Direct Submission
Submitted (17-JAN-1994) M. Duterque-Coquillaud, CNRS UA 1160,
Oncologie Moleculaire, Institut Pasteur, 1 rue Calmette, 59019
Lille, FRANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCATGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                  with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                 Unordain, P., Dewitte, F., Desbiens, X., Stehelin, D. and Duterque-Coquillaud, M. Mesodermal expression of the chicken erg gene associated will precartilaginous condensation and cartilage differentiation Mech. Dev. 50 (1), 17-28 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Length 1516;
                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΩB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
92.9%; Score 1344; D
Best Local Similarity 94.7%; Pred. No. 0;
Matches 1435; Conservative 0; Mismatches
                                       ďq
                                        1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                    G.gallus ERG mRNA.
X77159
X77159.1 GI:790439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
RESULT 4
GGERG
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
PUBMED
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 6 8 6
```

```
1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1320
            300
                                                          360
                                                                                                        360
                                                                                                                                                 420
                                                                                                                                                                                            420
                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                      009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                           TTGGGATGAACTATGGAAGCTACATGGAAGAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      541 TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACGAGTCACCACTCAGTCAAAAGCTACCAACTCATCTTCAACAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961 GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTATGACABACTCAGCGTGCACTTCGCTACTACTATGACAAAAATATTATGACTAAAG
241 CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                            ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                   TTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                          CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                 ccargaacgaaggrrarrergccagcagarccracgrrarggagcacagaccargrac
                                                                                                                                                                                                                                                                                                                                                              GGCAGTGGCTGGAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661 TTCCACATTTGACTTCAGATGATGATAAGGCCTTACAAAACTCTCCCACGGTTAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -------GAGGAGCCACTITTATTTTCCAAATACATCAGTTTACCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721 ATGCTAGAAACACAGGAGGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACGAGTCACCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCGGACAGCTCCCAACTCCAATCACCTCGGAGGGAACAAAAAGGGGAGTTCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGGGAGAAAGCAAAAGCAAACCTAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Trcaregraaacecrarecracaaarrrearrrecaceeaarcecrcaeeccrcaec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCACCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT
                                                                                                                                                                                                                                                                                                                                 GGCAGTGGCTGGAGTGGAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCGAGCTATAACGCAGATATCCTCTCTCACACCTACACTACCTCAGAGAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGAAAAAAGCAAACCTAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT
```

~

```
MHARNTGGAAFIFPNTSVYPBATORITTRPDLPYEPPRRSAWTGHGHPTPQSKAAQPS
TYBKTEDORPQLDPYQILGPTSSRLANPGSGQIQLWOFLLELLSDSSNSSGITWEG
TNGFFKWTDPDEVARWGERKSKPNMYDKLSRALRYYYDKOLIWTKVHGKRYAYKFDF
HGTAQALQPHPPBSSIYKYPEDLPYMGSYHAHPQKNNFVAPHPPALPVTSSSFFAAPN
PYMNSPTGGIYPNTLPTSHNPSHLGTYX"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SKMSPRVPQQDWLSQPPARVTIKMECNPSQVNGSRNSPDECSVAKGGKNVGSPDTVGM
NYGSYMBEKHMPPNMTTNERRVIVPADPTLMSTDHVRQWLEWAVKEYGLPDVNILLF
QNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDKALQNSPRL
                                                                                                                                                                                                                                                                                                                                                                                              /protein_id="AAH40168.1"
/db_xref="G1:25304066"
/db_xref="Locusid:2078"
/translation="MASTIKEALSVVSBDQSLFECAYGTPHLAKTEMTASSSDYGQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446. .694
/note="SAM_PNT; Region: Sterile alpha motif (SAM)/Pointed
                                                                                                                                                                                                                                                                                                                             oncogene like,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     469 GCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529 GCTGGAGTGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 AAGCACTATTAAGGAAGCATTATCAGTGGAGTGAAGACCAGTCCTTGTTTGAGTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109 CAGCACTATTAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGAGTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169 cracedaaceccacaccreecrasacacaeareacececercercerceaecearrates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         188 GCAAACATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAGITACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        289 cadocicaccarcaaaarddaarcraacccaadcraaarddaacaccaccaadaacaacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGATGACTGCAGGCGAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         349 rearida a reconstruito de la reconstruit del reconstruit de la reconstruit del reconstruit de la r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTATGGAAGCTACATGGAAGAGAAGCATATTCCGCCTCCAAATATGACAACCAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           428 ACGAAGATTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 GCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACATTATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 CTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229 ACAGACTICCAAGATGAGCCCACGCGTCCCTCAGCAGGATIGGCTGTCTCAACCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 2016;
                                                                                                                                                                                                                                                    04 . 1543
codon start=1
product="v-ets erythroblastosis virus E26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 65.9%; Score 953.4; DB 9; Best Local Similarity 79.6%; Pred. No. 2.2e-277; Matches 1190; Conservative 0; Mismatches 221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="CDD:pfam02198"
1031. .1282
/note="Ets; Region: Ets-domain"
/db_xref="CDD:pfam00178"
   clone_lib="NIH_MGC_92"
lab_host="DH10B"
'note="Vector: pCMV-SPORT6"
                                                                                                                                             gene="ERG"
| db_xref="LocusID:2078"
| db_xref="MIM:165080"
                                                                                                                                                                                                                                                                                                                                                               soform 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49
                                                                                                                  gene
                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Merazoa; Chordata; Craniata, Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases I to 2016)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.K., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Maruslana, K., Bramer, A.A., Rubin, G.M., Hong, L.,
Staplecon, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abrameon, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Hellcon, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnetch, A., Schell, J.E., Jones, S.J. and Marra, M.A.,
Chenzanian and marra, And Marra, M.A.
                                                                                                                                                                                                                                                                           2016 bp mRNA linear PRI 07-0CT-2003 Homo sapiens v-ets erythroblastosis virus E26 oncogene like (avian), transcript variant 1, mRNA (cDNA clone MGC:49020 BC040168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 84 Row: o Column: 9.
Location/Qualifiers
1359 ATACTGGAATTCACCAACTGGGGGTATATACCCCAACACTAGGCTCCCCACCAGCCATAT 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (12-NOV-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             With-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1419 GCCTTCTCATCTGGGCACTTACTACTAA 1446
                                                                    1391 GCCTTCCCATCTTGGCACCTACTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC040168
BC040168.1 GI:25304065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 2016)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Strausberg, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                RESULT 6
BC040168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                à
                                                                                                                              qq
```

108 127 168 187 228 247 288 307 348 367 408 427 468 487

67

528

547

```
1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1189 CGATAAGCTCAGCCGCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCA 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1369 CGCCCACACAGAAGATGAACTTTGTGGCGCCCCACCCTCCAGCCCTCCCCGTGACATC 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACTGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCTGGAGCTCCTGTC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1129 GGATCCCGACGAGGTGGCCCGGCGTGGGGAGAGGGGAAGAGCAAACCCAACATGAACTA 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCA 1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGGTAACCTC 1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGAC 1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      943
                                                                                                                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACAGCCATCCCA---CTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCCAA 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rcacedecacedecececaseres de para de la contra de la contra de la secontra de la contra del contra del la contra de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    883
                                 648
                                                                                                                                             708
cccccggagrcarcrcrgracaagracccrcagaccrcccgracarcarggcrccrarca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AICCAGCITITITICIGCCCCIAAICCAIACTGGAAITCACCAACTGGAGGCAICTACCC
                                                                                                                                                                                                                                                                                                                                                                 AAACACAGGGGGGGGCGCTTTTATTTTCCCAAATACTTCAGTATATCCTGAAGCTACGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAATTACAACTAGGCCAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACAGCTCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGGGAGTTCAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TICCAGITITITITGCIGCCCCAAACCCAIACIGGAAITCACCAACIGGGGGIAIAITIA
                                                                                                                          AAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTTGCAAATCCAGGGAGTGGGCCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1004 AGACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAAACCTAACATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAAATATTATGACTAAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAATACCAGGCTGCCAGCTGCTCTATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                                                                                                                                                                        -----GAGGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1543
                                                                                  CTATAACGCAGATATCCTCTGTCACACCTACACTACCTCAGAGAGA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1489
                                                                                                                                                                                                                                                                                                                                                                          694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1124
                                                                                  608
                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    824
                                                                                                                                                                                                    655
                                                                                                                                                                                                                                                                                                                   655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             점 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                            8
                                                                                                                          ద
                                                                                                                                                                                  중 음
```

```
CAGAGITACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACC
                   TGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGAT
                                                                                  248
    248
                                                                308
   ઠે
                          g
                                                               ò
                   linear ROD 07-AUG-2001 endothelial cell
                                                                                                 14
                AB031088 1808 bp mRNA Rattus norvegicus VESP14 mRNA for vascular specific protein 14, complete cds. AB031088 AB031088.1 GI:15128488 vascular endothelial cell specific protein Rattus norvegicus (Norway rat)
```

LOCUS

RESULT 7 AB031088 ACCESSION VERSION KEYWORDS SOURCE

307 367 367

SYGSYMEEKHMPPPNMTTNERRYJVPADPTLMSTDHVRQWLEMAVKEYGLLDVDVLLF ONIDGKELGCATTKDDPQRLTPPSYMADJILLSHHHYILKETPPLHTGDDVDKALQNBPRL MHARNTDLEY'E PPRRSTWTGHSHPTPQSKAAQPSPSTVPKTEDQRPQLDPYGJLGPTS SRLANGGSGQJQLMQPLLEILSDSNSNCTTWEGTNGEFKMTDPDEVARRWGERKSKP NMYYDKLSRALRYYYDKNIMTKVHGKRYAYKEDFHGJAQALQPHPPESSLYKKPSDLP NMSYDKLSRALRYYYDKNIMTKVHGKRYAYKEDFHGJAQALQPHPPESSLYKKPSDLP LGTYY" /product="vascular endothelial cell specific protein 14"
/protein id="RAB62744.1"
/bc.krie="ci:15128489"
/kranslarion="MASTIKEALSVVSKDOSLFECAYGTPHLAKTEMTASSSSDYGOTSKMSPRVPQQDWLSQPPARVTIKMECNPSQVNGSRNSPDECSVTKGGKNVGSPDTVGM ω, 127 127 187 187 247 247 67 67 Rattus norvegicus Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Direct Submission
Submitted (12-AUG-1999) Tomomi Aoki, Taisho Pharmaceutical Co.,
Ltd., Medicinal Research Laboratories, Molecular Biology Lab.;
1-403, Yoshino-cho, Omiya, Saitama 3308530, Japan
(E-mail:sl7704@ccm.taisho.co.jp, Tel:048-663-1111, 68 cagcacharraaccaccorrorcachroroaaccaaccachcarranthroacteroc CTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGG 128 CTACGGAACGCCACACCTGGCTAAGACAGAAATGACCGCATCCTCTCCAGTGACTATGG gagaagcaataattattaattaacatttaattaacgatcaataaacttgattgcattaidgc AAGCACTATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGC 188 GCAAACATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCCGGC 188 ccagacatocaagardaarcccagagroccacacagacaggerogerogerocagoccocago GCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACTATATGGC Gaps specific 12; Tawara, J., Ukai, Y. cell Tawara, J., Ukai, Y. Query Match 64.7%; Score 936; DB 10; Length 1 Best Local Similarity 80.2%; Pred. No. 4.2e-272; Matches 1140; Conservative 0; Mismatches 270; Indels 1 (bases 1 to 1808) Abcki,T., Toyoda,H., Nishimoto,S., Tawara,J., Uka Komursaski,T. Identification of VESP14,a vascular endothelial /organism="Rattus norvegicus" /mol_type="mRNA" /db_xref="taxon:10116" /db_xref="taxon:10116" /dissue_type="liver" /gene="VESP14" /note="similar to human erg1" 2 (bases 1 to 1808)
Acki,T., Toyoda,H., Nishimoto,S.,
Komurasaki,T. Location/Qualifiers /gene="VESP14" 63. .1430 'codon_start≈1 Unpublished ω 68 128 ORGANISM REFERENCE AUTHORS TITLE JOURNAL gene JOURNAL CDS FEATURES TITLE ORIGIN 셤 임 ઠે 셤 ઠે d ठ ઠે

```
291. .298
/note="8-bp repeat sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L'SHMPSHLGTYY"
                                                                                                            erg 2 protein.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       227 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              469
                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                             MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                 COMMENT
  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847
                                                                                                                                                                                                                                                                                                                                                                                      718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      967
                                                                         487
                                                                                                              487
                                                                                                                                                     547
                                                                                                                                                                                          547
                                                                                                                                                                                                                               607
                                                                                                                                                                                                                                                                    607
                                                                                                                                                                                                                                                                                                             662
                                                                                                                                                                                                                                                                                                                                               667
                                                                                                                                                                                                                                                                                                                                                                                                                             727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          907
                                      427
  427
                                                                                                                                                                         GCTGGAGTGGGCAGTGAAAAAAATACGGCCTCCTAGACGTGGACGTCTTATTATTTCAGAA
                                                                                                                                                                                                                                                       TATTGACGGGAAGGAGCTGTGCAAGATGACAAAAGATGACTTCCAGAGGCTCACTCCCGAG
                                                                                                                                                                                                                                                                                                          CTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA-----GAGGAGCC
                                                                                                                                                                                                                                                                                                                                                                                      ACTITITATITITICCAAATACATCAGTTTACCCAGAA----GCAACGCAAAGAATAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACACAGATTTACCTTATGAGCCTCCCAGGAGATCAACCTGGACCGGCCACAGCGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACCCCTCAGTCCAAAGCTGCCCAGCCATCTCCCTCCACAGTGCCCAAAACTGAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGTCCTCAGTTAGATCCTTACCAGATCCTGGGACCCACAGTAGTCGCCTTGCTAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Addragaeceagarceagereregeagricerecragaacreerereaeagereeaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAACTGCATCACCTGGGAAGGCACCAACGGGGGAGTTCAAGATGACAGACCGGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1016 AGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GOTGGCTCGGCGCTGGGGGGAGCCGAAGAGCAAGCCCAACATGAACTATGACAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTGCCTCCGCTACTACTACGACAAAAACATCATGACCAAGGTGCACGGGAAGCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1148 receraciada errica en recenso de arrece en esta e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grecerioracadoracecerecoaceroceracarosecereciareacadececea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCAATACCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rectacceceaaccearactedaarrececeacreceeecareraceeaaacacradeer
                      GCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTCCAGAA
                                                                                                                                                                                                                               CATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAG
                                                                                                                                                                                                                                                                                                                                         CTACAATGCCGACATTCTTCTCTCACACTACCTCAGAGAGACTCCCCTTCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                             CA---CTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCTCCACAATC
  GAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGA
                                                                                                              <u> AAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGGTCACAGCCATCC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCAACTGCATCACCTGGGAGGGCACAATGGGGAGTTCAAGATGACAGACCCTGATGA
                                                                           ACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1388 CCCAGCCAGCCATATGCCCTCTCACCTGGGCACCTACTA 1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCAGCTGCTCATATGCCTTCCCATCTTGGCCACCTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1136
                                                                                                                                                                                                                                                                    548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1256
                                    368
                                                                         428
                                                                                                              128
                                                                                                                                                   488
                                                                                                                                                                                          488
                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                          809
                                                                                                                                                                                                                                                                                                                                               608
                                                                                                                                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                                                                                                                             899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1376
8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            $ g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9 8 9
                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                   a
S
                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           СP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              $ B $
                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

SPDTYÖMNYGSYMEEKEMPPENMTTYERRYITPADPTLMSTDHYRQMLEWAYKEYGLP DVNILLPQNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDKA LONSRLAMANTDLEYEPPRRSAMYCHGHPPPGSKAAQPESSTYPKTEDQRPQLDFY OLIGPTSSRLANPGSGQIQUMQFLLELLSKOSSNSSCITWEGTNGEFKWTDPDBVARRW GERKSKPNMYYDKLSRLRYYDKNIMTKYHGRYYAYKEDFHOIAGALQPHPESSSLY KYPSDLPYMGSYHAHPQKMNFVAPHPPALPVTSSSFFAAPNFYMNSFTGGIYPNTRLP clone /trānslation="MIQTVPDPAAHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASS SSDYGQTSKNSPRVPQQDWLSQPPARVTIKNECNPSQVNGSRNSPDECSVAKGGKVVG 3 PRI 08-NOV-1994 193 408 253 468 313 528 373 Craniata, Vertebrata, Buteleostomi, Catarrhini, Hominidae, Homo. 254 TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA CTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA 134 ATCGCCCCACCTTGCAAAGACAGAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC ATCAAAGATGAGCCCCCCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT 409 TICCAAGAIGAGCCCACGCGICCCTCAGCAGGAITGGCTGTCTCAACCCCCAGGGT caccarcaaaaredaareraaceraeceaeereaareeereaaeeaaererearea TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG 289 rarcaaggaagccrrarcagrrergagreaggaccagregrrerreaggrergeccraegg 87263429 3299708 Original source text: Human cell line COLO 320, cDNA to mRNA, lambda 12. Gaps Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleos Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo. (Dases 1 to 3166) Rao, V.N., Papas, T.S. and Reddy, E.S. erg, a human ets-related gene on chromosome 21: alternative splicing, polyadenylation, and translation science 237 (4815), 635-639 (1987) 12; Length 3166; linear lete cds. Indels 3166 bp ss-RNA linea Human erg2 gene encoding erg2 protein, complete M17254 M17254.1 GI:182186 /note="8-bp repeat sequence"
3143. .3149
/note="putative"
upstream of PvuII site, chromosome 21. Query Match
63.6%; Score 921; DB 9; I
Best Local Similarity 81.1%; Pred. No. 1.6e-267;
Matches 1100; Conservative 0; Mismatches 245; 314

g

ें

임 õ qq ò ద

ò

रु व रु

qq

8 8

ठ व ठ

8 6 8

à ద 8 8

```
SSDYGÇISKMSPRVPQQDWLSQPPSRVTIKMECNPSQVNGSRSSPDDCSIGKGSKMGG
GSDNVGMNYGSYIEEKHISPPNMTTNERRVIVPADPTLMSTDHVRQWLEWAIKEYGLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DUDVILLEGATIO LIBERATIO THE THEORY OF THE SHEET SHEET SHEET FPNSSVYQ DANQYLL CRANDER SHEET FPNSSVYQ DANQYL PSRQDLSYBERRSANTHIPAPPSKASQPSTTVPKTEDPRPQLDPYQLLGPT SSRLANPGSGQLQLWQFLLELLSDSNSNCTTWGEFTWTEPFWTARRWGERKSK PNRTAPRGSGQLQLWQFLLELLSDSNSNCTTWGEFTWTGFFWTATDPDETARRWGERKSK PNRTAPPGSGQLQLWQFLATLYYYDKUIMTKVHGKRYAYKFPFHGIAQALQPHPPESTMYKYPSEL PYNSSYHAHPQXMNFVAPHPPALPYTSSSFFAAPNAYWNSPTGSIYPNTRLPASHMSSHLGTYY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
/protein_id="CAB46567.1"
/db_xref="G1:5420048"
/db_xref="GOA:QP629"
/db_xref="SPTRG9B6.29"
/db_xref="SPTRG9B6.29"
/translation="MIQTVPDPSAHIKEALSVVSEDQSLFECTYGTPHLTKTEMTASS
                                                                                                                                                    21-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Amphibia, Batrachia, Anura, Mesobatrachia, Pipoidea, Pipidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             257 TATCAAAGAACTCTTTCAGTGAGTGAAGATCAGTCGGTGTATTCGAGTGCACCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317 AACGCCACATCTTACTAAACGGAGATGACCGCATCTTCCTCCAGTGACTATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UPR9005, MMDCD, Centre
15, RUB Rene Descartes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                    VRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 2012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baltzinger,M., Mager-Heckel,A.M. and Remy,P.
Xl erg: expression pattern and overexpression during plead for a role in endothelial cell differentiation bev. Dyn. 216 (4-5), 420-433 (1999)
                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
      1609 CAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61.5%; Score 889.6; DB 5; 79.7%; Pred. No. 5.1e-258; ive 0; Mismatches 269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            function="Transcription factor"
                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1. 2012
| .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 | / .2012 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 2012)
Baltzinger, M.
Direct Submission
Submitted (24-FEB-1998) Baltzinger M.,
National de la Recherche Scientifique,
                                                                                                                                                 XLAJ4126

Xenopus laevis erg gene (erg_E).
AJ224126
AJ244126.1 GI:5420047
ERG gene; transcription factor.
Xenopus laevis (African clawed frog)
                                                                                                                                                                                                                                                                                                                                                                                                                                 Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               225. .1595
/gene="erg"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 79.7
Matches 1077; Conservative
                                                                                                                                                                                                                                                                                                                                      Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10633861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74
                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                       RESULT 9
XLAJ4126
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCACCACAGAAGAT 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGTTCGACTTCCACGGGATCGCCCAGGCCCTCCAGCCCCACCCCCGGAGTCATCTCT 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949 AGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGGTCACGGCCACCCCACGCC 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1009 CCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAAAGACCAGGGTCC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         redecadarceaectriedeaetrecrereaecrereresaacaecreaacreeae 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGC 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA 961
                                                                                                                                                        648
                                                                                                                                                                                                                                                                         708
                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITIAITITITCCAAATACATCAGITTACCCAGAAGCAACGCAAAGAATAACAACAAGGCC 724
                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAAATCCAGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAATTTGATTTCCACGGAATCGCTCAGGCCTCCAGCCTCACCCTCCAGAATCATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAACTITGIGGGGGCCCCACCCTCCAGCCTCCCGGGACAICTICCAGTITITITGIGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cecanacecanácidesarirescesacideseginariatececasecresegereceae
                                                                                                                                                    GTGGGCGGTGAAAAAAAAAAAAAGCCTTCCAGACGTCAACATCTTGTTATTCCAGAACATCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receaageaacrerecaagareaccaageaceacriceagagereacceceageracaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGGCGTTGGGGAGAGAGGAAAGCAAACCTAACATGAACTATGACAAACTCAGCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1082 ACTICGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTITIGIAGCTCCCCATCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTTTGCTGC
                                                                                          TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACGAAG
                                                                                                                                                                                                                  AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                      GTGGGCAGTGAAGGAATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCAGATATCCTCCTGTCACACCTACACTCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      782 TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTCATATGCCTTCCCATCTTGGCACCTACTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1202
                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                          374
                                                                                                                                                    589
                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                                                      494
                                                                                                                                                                                                                                                                                                                                                                                                                                                           554
```

ä

음 8 g S 8

ò

g

8 8 8

```
TTCCCATCTTGGCACCTACTACTAAGTGGGGA
                                                         TTCTCATCTTGGAACCTACTATTAAATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/chromosome="16"
                                                                                                                                                                                                 musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="Erg-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 79.3%;
Matches 1075; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  variant 1
                                                                                                                                                                                                 Mus musculus
Mus musculus
                                                            1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                     1394
             1511
                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                    DEFINITION
                                                                                                 RESULT 10
AB073078
                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SGS
                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
             유
                                 ò
                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1034 AGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTA 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1274 TCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCCCCTAATCCATA 1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1393
                                                                                                                                                                                                                                                                                                                                                                                                                             973
                                                                                                                                                                                                                                                                                                                                                                                                                                                       853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        973
                         496
                                                373
                                                                         556
                                                                                                  433
                                                                                                                         616
                                                                                                                                                 493
                                                                                                                                                                        676
                                                                                                                                                                                                 553
                                                                                                                                                                                                                         736
                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                           796
                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                            856
                                                                                                                                                                                                                                                                                                                                                    733
                                                                                                                                                                                                                                                                                                                                                                                                     793
 313
                                                                                                                                                                                                                                                                                                                                                                             857 CCCAAACTCATCCGTTTATCAAGACGCAAACCAAAGAATCCCCAGCAGGCAAGATTTATC 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1091 GCTCTGGCAATTCTTACTGGAACTGCTTTCGGATAGTTCCAACTCCAACTGCATTACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1271 CTACGATAAAATATTATGACTAAAGTCCATGGCAAGCGCTATGCTTACAATTTGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1331 TCATGGGATTGCTCAAGCTCTTCAACCTCATCTCCAGAATCAACTATGTACAAGTATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1214 ATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCCCCAGAAGATGAACTTTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1334 CTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTCATATGCC
                                                                                                                                                                                                                                                                                                                                                     TCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCCAGATTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                             917 ATATGAGCCCTCAAGGAGATCTGCTTGGACAAATCA---TCCTGCACCACCATCAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAGGAACCAATGGAGAATTTAAGATGACGGATCCTGATGAAGTGGCAAGACGTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                         TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       794 TACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGGGGTCCTCAGTTAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAGTGGGCAGATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATCAGATTCTTGGGCCAACAACAGCCGACTTGCAAATCCAGGAAGTGGGCAGATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTCGGCGTTGGGG
                    GACCATCAAGATGGAATGCAACCCTAGTCAAGTCAATGGATCAAGGAGCTCCCGGATGA
                                                                                                  TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                          TGGCAGCTACATAGAAGAAAAACACATTTCTCCCCCAAACATGACAATGAGAGGAG
                                                                                                                                                 AGTIAITIGIGCCAGCAGATCCTACGITAIGGAGCACAGACCAIGIACGGCAGIGGCTGGA
                                                                                                                                                                         GTGGGCAATAAAAGAATACGGCCTTCCAGATGTCGATGTGCTCCTGTTCCAAAACATCGA
                                                                                                                                                                                                                                                                           coccaacoantrarccaacarcaacaacaacarrirccarcoacrececaacracaa
                                                                                                                                                                                                                                                                                                    TGCTGATATCCTTCTCTCGCATCTTCACTACCTCAGAGAAAGAGAGGGGCGCCTCTTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974 ATCTCAAC---CATCTACCACAGTTCCCAAAACAGAAGACCCCAGGCCACAGCTAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATGACAAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTACAAATTTGATTT
                                                                                                                                                                                                  GTGGGCAGTGAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                     TTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCACTCAGTCAAAAGC
                                                                                                374
                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1451
                                                                        497
                                                                                                                          557
                                                                                                                                                 434
                                                                                                                                                                         617
                                                                                                                                                                                                                         677
                                                                                                                                                                                                                                                                           737
                                                                                                                                                                                                                                                                                                    614
                                                                                                                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                                                                                                                    674
                                                                                                                                                                                                                                                                                                                                                                                                     734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1151
                                                 314
                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                 엄
                                         ò
                                                                g
                                                                                         5 G
                                                                                                                                                \delta
                                                                                                                                                                  g
                                                                                                                                                                                        . à
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
Sakaki, Y.

Direct Submission

Submitted (16-0CT-2001) Masahira Hattori, The Institute of Physical Submitted (16-0CT-2001) Masahira Hattori, The Institute of Physical Submitted (16-0CT-2001), Genomic Sciences Center (GSC);

1-7-22 Sushiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-911, Pas.81-45-503-9170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LONSPRLMHARNTDLEYEPPRESAWTGHSHLTPQSKAAQPSPSAVFKTEDQRPQLDPY
QICAPTSSRLANPGSGQIQLWOFTLELLSDSSNSNCITWEGTNGEFKTDPDBYARK
GERKSKRPMYVDKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPPESSLY
KYPSDLPYMGSYHAHPQKMNPVSPHPPALPVTSSSFFRASPNPYWNSFTGGIYPNTRLP
ASHMPSHLGTYY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
/pooten_ad="BAB69948.1"
/db_xref="d1.1619171"
/db_xref="d1.1619171"
/translation="MIQTVPDPAAHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASS
SSPYGQTSYKABRNVPQQDAWLSQALSAYTXMECNPSQYMGSANVG
SPDYGMSYGSYMESGHVPPPNATTNERSTYVTYDADPTLMSTDHVRQWLEWAVESYCNL
SPDTVGMSYGSYMESGHVPPPNATTNERSTYVTPADPTLMSTDHVRQWLEWAVESYCLL
DVDVLLPQNIDGCKELCKAYTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDKA
CTGGAATTCACCAACTGGAAGTATTTATCCAAATACTCGGCTGCCAGCTAGCCATATGTC 1570
                                                                                                                                                                                                                                                                                                                           AB073078

2131 bp mRNA linear ROD 17-OCT-2001
Mus musculus Erg mRNA, mouse homolog of Human ers-related gene ERG,
transcript variant 1, complete cds.
AB073078.1 GI:16191716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACGCCACACCTGGCTAAGACAGAGATGACCGCATCCTTCCAGTGACTATGGCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTAAGGAAGCATTATCAGTGGGGGAGGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ratraadeadecerrereaderrereadeeadeeadeeadeearearerradageerereede
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus Erg mRNA
Published Only in Database (2001)
2 (bases 1 to 211)
Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .2131
/gene="Erg"
/gene="Erg"
/gene="Erg"
/gene="Erg"
/note="homolog of human ets-related gene (ERG),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 881.6; DB 10; Length 2131;
Pred. No. 1.4e-255;
0; Mismatches 269; Indels 12;
                                                                                                        1425
                                                                                                                                                                   1602
```

```
AB073080 GI:16197544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi
Matches 1111;
                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                     RESULT 11
AB073080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1260 CAAGITIGACITCCACGGGATIGCCCAGGCCCTGCAGCCCCACCTCCTGAGTCGTCCCT 1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020 IGGCCAGATCCAGCTGTGGCAGTTCCTGCTCGAACTCCTGTCAGACAGCTCCAACTCCAA 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCATCACCTGGGAGGCACAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1022 TCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGC 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1082 ACTICGCIACTACTATGACAAAATATTATGACTAAAGTICATGGIAAACGCTATGCTA 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTITGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGC 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGTCCAAAGCTGCTCAGCCATCTCCCTCTGCAGTGCCCAAAACTGAAGACCAGCGTCC 959
                                                                          419
                                                                                                                                                     433
                                                                                                                                                                                                                                                          553
                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                              779
                                                                                                                                                                                                                                                                                                                                                                                                                  724
                                                                                                                                                                                                                                                                                                                                                                                                                                           839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840 AGATTTACCTTATGAGCCTCCCAGAGATCAGCCTGGACCGGCCACGCCACCTCACCC 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA 961
                                                 313
                                                                                                                           Grecaergreaacaaegregeaagaregregecaeccegaracreregeareaegrea
                                                                                                                                                                                                     AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAAGACCATGTACGGCAGTGGCTGGA 493
                                                                                                                                                                                                                              AGTGATCGTCCTGCAGATCCTACTCTGTGGAGCACAGACCATGTCCGACAGTGGCTGGA 599
                                                                                                                                                                                                                                                                                Gradacagrahadaararagaccraccardradacarcritacrararracadaararaga 659
                                                                                                                                                                                                                                                                                                                                                               CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA------GAGGAGCCAC 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCGGCGTCTTGCAAATCCAGGGAG 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960 TCAGTTAGATCCTTACCAGATCCTGGGACCGACCAGTAGCTGCCTAATCCAGGTAG
            CGGCAGCTACATGGAGGAGGAGGAGCATGTGCCGCCTCCCCAATATGACCACAATGAGGCGCAG
                                                                                                                                                                                                                                                                                                                                                                               720 IGCCGACATICITCICICACATCICCACTACCICAGAGAGACICCCCTICCACATCIGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                          Trecgargaegrugaraagecruracaaaacrecrecaegruaargeargecagaaacae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCATCACCTGGGAAGGCACCAACGGGAGTTCAAGATGACAGACCGGACGAGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                          caccarcaagarggagraccaraccaagargaarggaraccaggaacrcagarga
                                                                                                   CTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                     TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                          GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                            TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                  TITIATITITICCAAATACATCAGTITIACCCAGAAGCAACGCAAAGAATAACAAGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATTTACCTTATGAGCAAGCGAGGACATCAGCGTGGACGAGTCACAGCCATC---CCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGAACAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
  ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1202
                        300
                                                254
                                                                          360
                                                                                                   314
                                                                                                                            420
                                                                                                                                                     374
                                                                                                                                                                               480
                                                                                                                                                                                                       434
                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                   009
                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                      999
                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                                                                  665
                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              962
                                                                                                                                              8 B 8
                                                                                                                                                                                                                         원 상 원
                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
ઠે
                       g
                                         \dot{\delta}
                                                                   8 % B
```

```
/organism="Mus musculus"
/mol_type="mRNN"
/mol_type="mRNN"
/db_xref="taxon:10090"
/chromosome="16"
/clone="Erg-3"
/clone="Erg-3"
/gene="Erg"
148. .1608
/gene="Erg"
/note="homolog of human ets-related gene (ERG), transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sakaki, Y.
Sakaki, Y.
Direct Submission
Submitted (16-007-2001) Masahira Hattori, The Institute of Physical
Submitted (16-007-2001) Genomic Sciences Center (GSC);
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
(R-mail:hattoridegoc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)
Location/Qualifiers

1. .2209
                                                                     1381
                                                                                                                                                                                                                                                                                                                        AB073080 2209 bp mRNA linear ROD 17-OCT-2001 Mus musculus Erg mRNA, mouse homolog of Human ets-related gene ERG, transcript variant 3, complete cds.
                           1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
Mus musculus
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1380 GAACTTTGTGTCTCCCCACCCTCCCCCCCCCCAGTCATCCAGTTCTTTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74 TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1322 CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGG
                                                                                                   1440 CCCGAACCCATACTGGAATTCACCGACTGGGGGCATCTACCCGAACACTAGGCTCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus Erg mRNA
Published Only in Database (2001)
2 (Dases 1 to 2209)
Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59.9%; Score 867.2; DB 10; Length 2209; larity 77.8%; Pred. No. 3.2e-251; Conservative 0; Mismatches 233; Indels 84;
                                                                                                                                                                 1382 IGCICATATGCCTTCCCATCTTGGCACCTACTACTA 1417
```

13

1499 1369

8 6

8 6

8 8

8 8

8 B S

g

8 8

ò 셤 ري 19

ò d 8 6 ò . qq 8 셤 ò

8 S g B & B & B & B

```
/procein_id="Cad79712.1"
//procein_id="CAD79712.1"
//dx xxef="CI:29160009"
//dx xxef="REMTEMBL:CAD79712"
//translation="WRNGSPDTVGMNYGSYMEEKHMPPPNMTTNERRVIVPADPTLWST
IRRAWARVTGENGYDENDVNILLFORDIGENELCWTKODDFGRATPGENELHY
IRRAGARITEPNTSYYEARORITHPRDLFYEEPRRSAWTGHGHPPPOSKAAQPSPST
VPKTEDQRPQLDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSSNSSCITWEGTNG
AQALQPHPPRSSLYKTSPDLFYRMGSYHAHPQKWNFVYYDKNIMTKVHGKRXAXKEDFHGI
AQALQPHPPRSSLYKTSPDLFYMGSYHAHPQKWNFVAPPHPPALPVTSSSFFAAPNFYN
NSPTGGIYPNTRLPTSHMPSHLGTY"
 1320 GCGCTACGCCTACAAGTTTGACTTCCACGGGATTGCCCAGGCCCTGCAGCCCTGCACCCTCC 1379
                                                                                                                                                                                                                                                                                                                                                                                            PAT 22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                    CCCCCAGAAGATGAACTTTGTGTCTCCCCACCCTCCCGGCTCTCCCAGTCACATCTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Luyten, F., de Bari, C. and Dell'Accio, F.
Polynucleotide sequences and vectors useful for the prevention treatment of bone- or cartilage-related disorders
Patent: WO 03000724-A 3 03-JAN-2003;
Tigenix N.V. (BE)
Location/Qualifiers
                                                                                                                                                                                                                    1500 TTCTTTGCTTCCCCGAACCCATACTGGAATTCACCGACTGGGGGCATCTACCCGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAG
                                                                                                                                                                                               1310 CTTTTTTGCTGCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    354 GACAATGTTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCATATTCCGCCTCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAAGGAATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGACAACCAATGAACGAAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3;
                                                                                                                                                                                                                                                               Length 1291
                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 57.6%; Score 833.6; DB 6; Best Local Similarity 84.3%; Pred. No. 4.9e-241; Matches 951; Conservative 0; Mismatches 174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .1291
/ organism="Homo sapiens"
/mol type="unassigned DNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/db_sref="taxon:9606"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                        AX657230 1291 bp
Sequence 3 from Patent W003000724.
AX657230
AX657230.1 GI:29160008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                            1440
                                                                                                                          1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                      RESULT 12
AX657230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                            8
                                                                                   g
                                                                                                                       ò
                                                                                                                                                      g
                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
   193
                                   299
                                                                      253
                                                                                                        359
                                                                                                                                         313
                                                                                                                                                                             419
                                                                                                                                                                                                              373
                                                                                                                                                                                                                                            479
                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                   539
                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                                                                                                                                                                                                                                                                        599
                                                                                                                                                                                                                                                                                                                                                                                                                           553
                                                                                                                                                                                                                                                                                                                                                                                                                                                           629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          839
                  A CCCCACACCTGGCTAAGACAGAGATGACCGCATCCTTCCAGTGACTATGGCCAGAC
                                                                                                                                      TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                   420 GTGCAGTGTGAACAAAGGTGGGAAGATGGTGGGCAGCCGGATACTGTGGGGGATGAGGTA
                                                                                                                                                                                                                                                                                                      GTGGGCGGTGAAAAAAATATGGCCTCCTCGATGTGGACGTCTTACTATTTCAGAATATCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Teggaaggaagcrerecaagargacaaagargacrrecagcgecreacgecraaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAATCCAGGTAGTGGCCAGATCCAGCTGTGGCAGTTCCTGCTCGAACTCCTGTCAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGATGAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAAACCTAACATGAACTATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACGAGGTGGCTCGGCGCTGGGGGGGGGAAGAGAGCAAGCCCCAACATGAAATTGACAA
                                                                                         AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                             840 AGGGGGGCGCTTTTTTTTTCCGAATACTTCAGTATATCCCGAAGCTACGCAAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACCTCACCCTCAGTCCAAAGCTCCTCAGCCATCTCCCTCTGCAGTGCCCAAAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGACCAGCGICCICAGITAGAICCITAICAGAITCITGGACCACCAGCAGCCGICITGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCAACTCCAACTGCATCACCTGGGAAGGCACCAACGAGGATGACAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAA
                                                                    ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                         360 caccarcaagarggagrgcaacccragrcaggrgaarggrrccaggaacrcaccrgarga
                                                                                                                                                                                                            CTGCAGCGTGGCAAAAAGGAAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                 TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        713 AACAACAAGGCCAGATTTACCTTATGAGCAAGGGAGGAGATCAGCGTGGACGAGTCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATC---CCACTCAGTCAAAAGCTACCCAACCATCATCATCAACAGAGGCCCAAAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCAACTCCAACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTCAGCCGCCCTCCGCTACTACTACACAAAACATCATGACCAAGGTGCACGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCC
ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --GAGGAGCCACTITIATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
134
                                 240
                                                                   194
                                                                                                      300
                                                                                                                                      254
                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                374
                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                         494
                                                                                                                                                                                                                                                                                                                                                                                                                                                             009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          655
```

ö

ä 353 160 413

musculus (house mouse)

```
ORGANISM
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCT 1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGAAGTGGCTCGGCGTTGGGGAGAGGAAAGCAAACCTAACATGAACTATGACAAA 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAA 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACA 1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1001 GAGTCATCTCTGTACAAGTACCCCTCAGACCTCCGTACATGGGCTCCTATCACGCCCAC 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGC 1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCACAGAAGATGAACTTTGTGGCGCCCCACCCTCCCAGCCCTCCCGTGACATCTTCCAGT 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1311 TITITIGCIGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACC 1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  crcaecececercerracraracraradadaacareareaceaeceaeceareeaaa 940
                                                                                                    AGACTCACGCCGAGCTATAACGCAGATATCCTCTGTCACACCTACACTACCTCAGAGAG 653
                                                                                                                                                                                                                                                                                                                                                                                               GACGAGGTGGCCCGGCGCTGGGGAGGGGAAGAGCAAACCCAACATGAACTACGATAAG 880
533
               TIGITATICCAGAACAICGAIGGGAAGGAACIGIGCAAGAIGACCAAGGACGACTICCAG 400
                                                                                                                                                           AGAGGAGCCACTITIATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATA 713
                                                                                                                                                                                     520
                                                                                                                                                                                                               773
                                                                                                                                                                                                                                        ACAACTAGGCCAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGGTCACGC 580
                                                                                                                                                                                                                                                                  830
                                                                                                                                                                                                                                                                                  AATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGC 950
                                                                                                                                                                                                                                                                                                                                                                                                                                                          rccaacrccagcracarcaccrassassassassassassassassassas 820
                                                                                                                                                                                                                                                                    CATCCCA---CTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1121 Tritingenececahacecanacigaarineaceaaciesesarananacecaacac
CATGTACGCCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATC
                                                   TTGTTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAG
                                                                                                                                                                                AGGGGGCGCTTTTATTTTCCCAAATACTTCAGTATATCCTCAAAGCTACGCAAAGAATT
                                                                                                                                                                                                             ACAACAAGGCCAGATTTACCTTATGAGCAAGGAGAGATCAGCGTGGACGAGTCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1181 AGGCTCCCCACCAGCCATTGCCTTCTCATCTGGGCACTTACTACTAA 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1371
                                                                                                                                                                                                                                                                                                                      831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1251
                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                          761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1191
                                                   534
                                                                                                       594
                                                                                                                               401
                                                                                                                                                           654
                                                                                                                                                                                   461
                                                                                                                                                                                                               714
                                                                                                                                                                                                                                        521
                                                                                                                                                                                                                                                                  774
                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                   641
                                                                                                                                                                                                                                                                                                                                                                             891
                                                                                                                                                                                                                                                                                                                                                                                                     701
                                                                                                                                                                                                                                                                                                                                                                                                                                 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     881
                         281
                                                                                                                                                                                                                                                        8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                 6
                                                  8 8
                                                                                             8 8 8
                                                                                                                                                                           음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

AB073079 2133 bp mRNA linear ROD 17-OCT-2001 NN Mus musculus Erg mRNA, mouse homolog of Human ets-related gene ERG, transcript variant 2, complete cds.

RESULT 13
AB073079
LOCUS
DEFINITION Mus musculus Erg mENA, 1
Lranscript variant 2, ct
ACCESSION AB073079
REFYGORD
KEYWORDS

Submitted (16-007-2001) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suchiro-chour Teurumi-Ku, Yokohama, Kanagawa 230-0045, Japan 18-41-41-41-41-41-41, Pax:81-45-503-9170)
Tel:81-45-503-9111, Fax:81-45-503-9170)
Tel:81-45-503-9111, Fax:81-45-503-9170)
Tocation/Qualifiers
Tocation/Qualifiers
Tocation/Qualifiers
Tocation/Qualifiers
Tocation/Chalifiers
Toca 1. .2133 |/gene="Erg" |/gene="Erg" |/gene="Erg" |/note="homolog of human ets-related gene (ERG), transcript ď 133 193 300 253 360 313 420 373 480 433 540 Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mu 134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC 361 caccatcaagardgagigcaaccragrcaggigaarggricaggaacrcaccrgarga rarraagaagaccrrarcagragraagaagaaccagraacrarrraagragragcag 241 AACGCCACACCTGGCTAAGACAGAGATGACGGCATCCTCTTCCAGTGACTATGGCCAGAC 254 TACCATTAAGATGGAGTGTAACCCAAGGTTAATGGGTCAAGGAATTCACCTGATGA CTGCAGCGTGGCAAAAGGAAAAAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA TATTAAGGAAGCATTATCAGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT 421 grecaerereaacaaagereesaacareereeseageceesaracrereesaacra 374 TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG Gaps Sakaki,Y.
Mus musculus Erg mENA
Published only in Database (2001)
2 (bases 1 to 2133)
Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. 21; Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. 57.2%; Score 828; DB 10; Length 2133; llarity 76.8%; Pred. No. 2.5e-239; Conservative 0; Mismatches 295; Indels 21 variant 2 Direct Submission Best Local Similarity Matches 1046; Conserv Sakaki, 74 181 194 301 314 Query Match 481 TITLE JOURNAL REFERENCE AUTHORS REFERENCE AUTHORS TITLE JOURNAL gene CDS FEATURES ORIGIN \$ g g à 용 ઠ્ઠ ద g ઠે ਨੇ

```
/ codon_etart=1
/protein_id="CAB46566.1"
/db_xref="G1:42404656.1"
/db_xref="G1:542040.09W700"
/db_xref="G1:542040.09W700"
/db_xref="G0:542040.09W700"
/db_xref="G0:542040.09W700"
/db_xref="G0:542040.09W700"
/db_xref="G0:542040.09W700"
/db_xref="G0:542040.09W700"
/db_xref="G0:542040.09W620PSRVTIRMECNPSQVNGSRSSPDDCSIGKGSKMSSBDVGANSWSPRVPRENDEPRATICHSTPLWFTHATMENTALKSGNGMSSSDNVGANGVGSPTRGNGPRATTENPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRTIPDSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRVTIRDPSRTIPDSRTIPSRSTIPSRVTIRDPSRVTIRDPSRTIPSRSTIPSRVTIRDPSRVTIRDPSRTIPSRSTIPSRVTIRDPSRTIPSRSTIPSRVTIRDPSRTIPSRSTIPSRVTIRDPSRTIPSRSTIPSRVTIRDPSRTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIPSRSTIP
                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159 TAGTAATGAAGCTCTTTCAGTGAGTGAAGATCAGTCGTTATTCGAGTGCACCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   419 AACGCCACATCTTACTAAAACGGAGATGACGCATCTTCCTCCAGTGACTATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              479 cricada de de concencia de contra casa de contra de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254 TACCATTAAGATGGAGTGTAACCCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   539 GACCATCAAGATGGAACCCTAGTCAAGACCAATGGATCAAGGAGCTCCCCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UPR9005, MMDCD, Centre
15, RUE Rene Descartes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1798;
                                                                                                                                                                                                                                                                                                                                              Baltzinger,M., Mager-Heckel,A.M. and Remy,P.
Xl erg: expression pattern and overexpression during
plead for a role in endothelial cell differentiation
Dev. Dyn. 216 (4-5), 420-433 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 55.4%; Score 801.8; DB 5; Length Best Local Similarity 75.3%; Pred. No. 2.2e-231; Matches 1079; Conservative 0; Mismatches 267; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="xenopus laevis"
/mol type="mRNA"
/db_xref="texon:8355"
/clone="lambda ZAPII-erg A"
/clone="lib="lambda ZAPII"
/dev erage="stage 30 embryo"
1. 1798
/gene="erg"
321. 1778
/function="transcription factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
Submitted (24-FEB-1998) Baltzinger M.,
National de la Recherche Scientifique,
AJ224125
AJ224125.1 GI:5420045
ERG gene, transcription factor.
Kenopus laevis (African clawed frog)
Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 (bases 1 to 1798)
Baltzinger, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67084, FRANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10633861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .018 Addradrodeccadarccadcrordecadriccrocroaacrocrordadadadadcrocaa 1077
                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       955
                                                                               600
                                                                                                                                                              553
                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 Tecceacárcircircicacarcicacarárcicas a a a a a contra contra de a contra contra de contra de
                                                                                                                                                                                                                                                                                                                                                                  1318 GICCCIGIACAAGIACCCCTCCGACCIGCCAIACAIGGGCTCCIAICAAGGCCACCCCA
                                         GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                        TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAAATACATCAGTTTACCCAGAAGCAA-------CGCAAAGAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            716 AACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGTCAGCGTGGACGAGTCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841 AGGGGGTGCAGCTTTTTTTTTTTCCCAAATACTTCAGTATATCCCGAAGCTACGCAAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCCACTCAGTCAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACAACTAGGCC---AGCTGCTCAGCCATCTCCCTCTGCAGTGCCCAAAACTGAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GOGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               958 GGTCCTCAGTTAGATCCTTACCAGATCCTGGGACCGACCAGTAGCCGCCTTGCTAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    crecaacrecarcaccreegaagecaccaacegegagricaagareacagaceda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1016 AGTGGCTCGGCGTTGGGGAGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1138 géridégeridégégégégégégégakangangangangangangangangangangan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAAACGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1198 ccececciccecraciaciaceacaaaaacaicaisaccaaggigcacaaggaagccia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1136 TGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCAGAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1196 ATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAGATGAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTCCCCGAACCCATACTGGAATTCACCGACTGGGGGCATCTACCCGAACACTAGGCT
    AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAGCCAGCCATATGCCCTCTCACCTGGGCACCTACTACTA 1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1438
                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1076
                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 836
                                                                                                                                                                                                                                 601
                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ व
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
ò
                                                                                                                                             à
                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

Ę 133 418 193 478 253 538 313 598

658

CIGCAGTATAGGAAAGGAAAGGAAAATGGGTGGAGGGTCGGATAATGAATTA

CTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA

314

ò

VRT 21-JAN-2000

mRNA

1798 bp (erg_A).

gene erg

XLAJ4125 Xenopus laevis

RESULT 14 XLAJ4125 LOCUS DEFINITION

27-APR-1993

PRI cds.

linear

S

CDNA

```
/codon_start=1 /codon
                                                                                                                                                                                                                                   Eukaryotes, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryotes, Metazoa; Chordata; Catarrhini; Hominidae; Homo. 1 (bases 1 to 3126)
Reddy, E.S., Rao, V.N. and Papas, T.S.
The erg gene: a human gene related to the ets oncogene Proc. Natl. Acad. Sci. U.S.A. 84 (17), 6131-6135 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A-----GAGGAGCCACTTTTTTTTTCCAAATACATCAGTTTACCCAGAAGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGACAACCAATGAAGGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGTACGGCAGTGGCTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGITIGITICCAGAACATIGATGGGAAAGAGTIGIGTAAAATGACCAAAAGATGACTICCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAAGGAATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                354 GACAATGTTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCATATTCCGCCTCCAAAT
GCTGCCAGCTGCTCATATGCCTTCCCCATCTTGGCACCTACTAAGTGGGGA
                   source text: Human, cell line COLO 320,
                                                                                                                      gene) mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 760.2; DB 9;
Pred. No. 9.7e-219;
0; Mismatches 208;
                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. 3126
/organism="Homo sapiens"
/mol_type="mRNN"
/db_xrefe"taxon:9606"
                                                                                                                  HUMERGII 3126 bp
Human erg protein (ets-related g
M21535 M17390
M21535.1 GI:182182
erg protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="erg1 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 80.7%;
Matches 917; Conservative
                                                                                                                                                                                                      1 of 2
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      Original solumbda-7.
                                                                                                                                                                                                                                                                                                                                                                           3476934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        654
                                   1733
     1373
                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SEGMENT
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                     RESULT 15
HUMERG11
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SGS
                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
     8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACG 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGA 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1019 AGGAGGTGCCTCTTTTATTTTCCCAAACTCATCCGTTTATCAAGACGCAAACCAAAGAAT 1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 952
                                                                                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGG 772
                                                                                                                        778
                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                        898
                                                                                                                                                                                                                                                                                         654
                                                     718
                                                                                       493
                                                                                                                                                          553
                                                                                                                                                                                        838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCCAGCAGGCAAGATTTATCATATGAGCCCTCAAGGAGATCTGCTTGGACAAATCAT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caccerecacricerraciacracearaaaararrareacraaagrecareeee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u> arcaaccardracaagrarccercagaacrrecararargagercaraccargecacarce</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCCGTAACCTCATCCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCAATACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAGTGGCTTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1613 ACAGAAGATGAACTTTGTTGCCCCCATCCGCCAGCTTTACCTGTGACATCGTCAAGTTT
                                            Gradecaaraaaaaaaaaaaaaccrrccaaaacaaccrccrcrcrcaaaacarcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATCCCACTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACACAGCTC
                                                                                                                                                          GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                        TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                     recreatarectreresearcheachacheadadaaacreererecaearreae
                                                                                                                                                                                                                                                                                                                                                                                                                           --GAGGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAAT
                                                                                         AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                           CGCAGATATCCTCTGTCACCACCTACCTACCTCAGAGAGA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1553
                                                                                                                                                                                                                                                                                                                             899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1073
                                                                                                                                                                                                                                                                                                                                                             655
                                                                                                                                                                                                                                                                                                                                                                                                                               655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      893
                                                                                                                                                                                                                                                          839
                                                                                                                                                                                                                                                                                           614
                                                           629
                                                                                                                         719
                                                                                                                                                          494
                                                                                                                                                                                          179
                                                                                                                                                                                                                          554
                                                                                         434
                                                                                         원 상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 B 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   දු පු
                                                   셤
```

ñ

Gaps

12;

Indels

Length 3126

209 413 269 473 329 533 389 593 449

	CAAAGAATAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGGATCAGCGTGGACG	570 TDAATGCATGCTAGAACACAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACC 629	765 AGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCATCATCATCAGTGCCC 821	630 GGTCACGGCCACGCCCCAGGCCCAAAGCTGCTCAACCATCTCCTTCCAAGGTGCCC 689	822 AAAACAGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCGACC	690 AAAACTGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGC 749	882 CGTCTIGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTG 941	750 GGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGGCTTTGGCAGTTCCTCCTGGAGCTCCTG 809	942 TCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATG 1001	810 TCGGACAGCTCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATG 869		870 ACGGATCCCGACGAGGAGGGCCCCGGCGCTGGGGAGAGGGGAAGAGCAAAACCCAAACATGAAC 929	1062 TATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTT 1121	930 TACGATAAGCTCAGCCGCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTC 989		990 CATGGGAAGCGCTACGCCTACAAGTTCGACTTCCACGGGATCGCCCAGGCCTCCAGCCC 1049	1182 CACCCTCCAGAATCATCCATGTACAATACCCATCAGACCTCCCCTACATGAGTTCCTAC 1241	1050 CACCCCCGGAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTAT 1109	1242 CATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACC 1301		1302 TCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCCACCAACTGGAGGCATCTAC 1361		1362 CCCAAIACCAGGCIGCCAGCIGCTCATAIGCCTICCCATCTIGGGACCIACTAA 1418	1230 CCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1286
510	705	570	765	630	822	069	882	750	942	810	1002	870	1062	930	1122	066	1182	1050	1242	1110	1302	1170	1362	1230
qC	ò	qq	δ'n	QQ	ò	q	δ	qq	ن	qa	δλ	Q	δ	qq	ò	qq	δλ	qq	ò	qq	λ̈́o	qq	ζ	DÞ

Search completed: May 27, 2004, 19:25:05 Job time : 5825 secs Н

core: lay 27, 2004, 16:28:01; Search time 674 Seconds May 27, 2004, 16:28:01; Search time 674 Seconds (without alignments) 9120.390 Million cell updates/sec US-09-902-772-1 able: lay 27, 2004, 16:28:01; Search time 674 Seconds (without alignments) 1920.390 Million cell updates/sec 1930.390 Million cell updates/sec 1940.390 Million cell updates/sec 1940.300		_	
Core 1 Search Using sw mode Core 1 Search time 674 Seconds Core 140 Seattccgcgaacgaataatgaaagaaagcgccaagaaaa 147 Core 140 Seattccgcgaacgaataatgaaagaaagcgccaagaaaa 147 Core 140 Seattccgcgaacgaacgaacaataatgaaagaaagcgccaagaaaa 147 Core 140 Seattccgcgaacgaacgaacaacaataatgaaagaaagcgccaagaaaa 140 Core 140 Seattcagcaacgaacgaacaacaacaacaacaacaacaacaaca	Copyright (c) 1993 - 2004 Compugen Ltd.	0 0	
May 27, 2004, 16:28:01; Search time 674 Seconds May 27, 2004, 16:28:01; Search time 674 Seconds (without alignments) 9120.390 Million cell updates/sec US-09-902-772-1 Gabezt 1.0 Gapop 10.0, Gapext 1.0 3373863 seqs, 2124099041 residues Besq length: 0 Besq length: 0 Maximum March 0* Maximum March 100* I. geneseq_290an04:* Maximum March 100* Maximum March 100* I. geneseq_290an04:* Maximum March 100* I. geneseq_200108:* Geneseq		01	38
May 27, 2004, 16:28:01; Search time 674 Seconds (without alignments) 9120:390 Million cell updates/sec 194-79-902-772-1 1 gaattcogcgaacgaataatgaaagaaagcgccaagaaaa 1447 2373863 seqs, 2124099041 residues 247 32 28 seq length: 00 29 33 20 6 8 8 8 9 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	aic - micraic edaten, delig es model	טנ	3.6
William Call updates/sec	May 27, 2004, 16:28:01; Search time 674 Seconds	0 31	38.
US-09-902-772-1 C 34	(without alignments) 9120.390 Million cell undates/sec	0	354.
US-09-902-772-1 Core: 1447 Core: 1447 Core: 1447 Core: 346 Captrocagaacgaataatgaaagaaagcgccaagaaaa 1447 Core: 38 Cable: IDENTITY_NUC Core: 39 Captrocagaacgaacgaactaat 3373863 seqs, 2124099041 residues Ber of hits satisfying chosen parameters: 6747726 Core: 39 Core: 340 Core: 340 Core: 340 Core: 370 Core:		C 34	354
1447 1 1447 2 2 2 2 2 2 2 2 2		m	
able: IDENTITY_NUC able: IDENTITY_NUC Gapop 10.0, Gapext 1.0 3373863 seqs, 2124099041 residues ber of hits satisfying chosen parameters: 6747726 gesping: Minimum Match 04 Maximum Match 1004 Maximum Match 1004 Maximum Match 1004 Essing: Minimum Match 1004 Maximum Match 1004 Maximum Match 1004 Axio Geneseq 29 Jand4:* 1. Geneseq 29 Jand4:* 2. Geneseq 29 Jand4:* 3. Geneseq 29 Jand6:* 45 Axio Geneseq 29 Jand6:* 45 Axio Geneseq 29 Jand6:* 45 Axio Geneseq 29 Jand6:* 46 Axio Geneseq 29 Jand6:* 47 Axio Geneseq 29 Jand6:* 48 Axio Geneseq 29 Jand6:* Axio Geneseq 29 Jand6:* Axio Geneseq 20	core:	m	
6747726 C 39 C 40 41 42 43 44 45 RESULT 1 RAX26551 ID AAXX XX	Sequence: 1 gaattocgcgaacgaataatgaaagaaagcgccaagaaaa 1447	יי) ני	
6747726 c 40 41 42 43 44 44 45 885ULT 1 AAX26551 1D AAX2 XX XX XX AC AAX2 XX XX DT 14-3 XX XX XX C AC AAX2 XX XX C AC AAX2 XX XX C AC AAX2 XX XX C C C C C C C C C C C C C C C C C		. m	
# 41 # 43 # 4 4 # 4 5 # 5 # 7 # 7 # 7 # 7 # 7 # 7 # 7 # 7		4	
42 43 44 45 45 45 46 45 47 48 48 48 48 49 49 49 49 49 49 49 49 49 49 49 49 49		41	3
### 44	Sarched: 3373863 segs, 2124099041 residues	45	
RESUL RAZSE AAX26 AAX26 AAX26 AAX67 AAX6		4.3	
RESUI RESUI AAAX8 AAXA AAXA AAXA AAXA AAXA AAXA AA	Total number of hits satisfying chosen parameters: 6747726	44	320
RESUL RESUL AAX26 AX AC AC AC XX XX AC XX XX XX		4	320
RESUI AAX26 AAX26 XX XX XX ACX ACX XX XX XX XX	DB seq length: 0 DB seq length: 2000000000		
NESUT NESU	ocessing: Minimum Match 0% Maximim Match 100%		
N Geneseq 29Jan04;* N Geneseq 29Jan04;* N Geneseq 29Jan04;* XX Z: geneseq 29Jan04;* XX XX Z: geneseq 20Jan04;* XX XX Z: geneseq 20Jan04;* XX XX XX XX XX XX XX	Listing first 45 summaries	RESUL	1 1
N. Geneseq_29Jan04:* II. geneseqn1980s:* XX		AAX26	551
1: genesequ1980s:* 2: genesequ1990s:* 3: genesequ2001s:* 4: genesequ2001as:* 5: genesequ2001as:* 6: genesequ2001as:* 7: genesequ2003as:* 8: genesequ2003as:* 9: genesequ2003as:* 7: genesequ2003as:* 8: genesequ2003as:* 7: genesequ2003as:*	Database : N Geneseq 29JanO4:*		AAX2655
genesequ1990s:* genesequ2001s:* genesequ2001as:* genesequ2001as:* genesequ2001as:* genesequ2001as:* genesequ2003s:* genesequ2003s:*	-		
genesequ2000s:* genesequ2001bs:* genesequ2001bs:* genesequ2003s:* genesequ2003s:* XX genesequ2003s:* Genesequ2003s:*	2: genesequ1990s:*		AAX2655
geneseqn2001as:* geneseqn2001bs:* geneseqn2002as:* geneseqn2003as:* geneseqn2003bs:* geneseqn2003bs:*			
geneseqn2001bs:* geneseqn2002as:* geneseqn2003as:* geneseqn2003bs:* geneseqn2003bs:* KW			14-JUN-
geneseqn2002s:* geneseqn2003as:* geneseqn2003as:* geneseqn2003bs:* KW geneseqn2003cs:* KW			
genesequivolas:* genesequivolas:* genesequivolas:* KW genesequivolas:* KW			ona enc
genesequizooss. Yenesequizooss. KW			Thicken
0. general 2004s.*			cell ca
			ossific

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	1 DNA enco 2 DNA enco 6 Nucleoti 9 Angiogen 5 Lung can 4 Prostate	000L00440040H0U0H
SUMMARIES	AAX26551 AAX26552 ABX08766 ABX08759 ABX76295 ADB75274 ABZ68767	ABZ68769 ABZ68768 ADA02688 ADB72427 ADB72426 AAQ50644 ADB72430 ABX04139 ABX04139 ADR02691 AABX02691 AABX02915 AABX0603
DB	4400000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
% Query Match Length	1447 1528 1509 1389 3166 1291	11111111111111111111111111111111111111
% Query Match	7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
Score	# M # M M M M	74077770000000000000000000000000000000
Result No.	4 0 6 4 10 6 7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

	Aba48124 Human bre		Aak40160 Human bon	Aak14426 Human bra	Abs39742 Human liv	Aai06643 Probe #66		DNA en	Aba68128 Human foe	Aai48339 Probe #17	Human	Probe	Aak42265 Human bon	Aak16512 Human bra	Abs41873 Human liv	Aai08696 Probe #86	Human	Ada02687 Mouse Fli	Adb72425 Mouse Fli	Aag50662 Human Hum	Ada02690 Human FLI
AA146176	ABA48124	ABA33090	AAK40160	AAK14426	ABS39742	AAI06643	ABS14215	ABS73253	ABA68128	AA148339	ABA50193	ABA35152	AAK42265	AAK16512	ABS41873	AA108696	AAC01342	ADA02687	ADB72425	AAQ50662	ADA02690
4	4	4	4	4	4	Ŋ	9	9	4	4	4	4	4	4	4	Ŋ	'n	ω	0	~	œ
567	567	567											473	473	473	473	533	72732	72732	1890	73725
1	۲.	۲.	۲.	۲.	۲.	۲.	۲.	60	'n	'n	'n	īŪ	'n	'n	īŪ	'n	'n	Ŋ	N	٦.	H.
5	26	56	56	56	26	56	56	24	24	24.5	24	24	24	24	24	24	22	22	22	22	22
387	387	387	387	387	387	387	387	358.6	354.6	354.6	354.6	354.6	354.6	354.6	354.6	354.6	325	321.4	321.4	320.4	320.4
24	25	56	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ū	υ	υ	U	υ	υ	U	U		υ	υ	υ	υ	υ	υ	υ	O					

ALIGNMENTS

An active protein for inhibiting cell calcification - useful for measuring the calcification of a cell, for diagnosing arthritis deformans or ossification of spinal column ligament. The present sequence encodes a chicken C-11 protein which has cell calcification inhibiting activity. The specification also describes a cell calcification inhibiting agent containing c-erg protein (AAYO1521). The proteins are used for measuring the calcification of a cell, for diagnosing arthritis deformans or ossification of spinal column ligament Chicken, C-11 protein; cell calcification inhibiting activity; cell calcification inhibiting agent; c-erg protein; arthritis deformans; ossification; spinal column ligament; ss. Disclosure; Page 7-8; 15pp; Japanese. Location/Qualifiers 63. .1418 /*tag= a coding chicken C-11 protein. 51 standard; DNA; 1447 BP. 98JF-00166076. 97US-00878177. 97US-0050297P. (CHUS) CHUGAI PHARM CO LTD. (UYPE-) UNIV PENNSYLVANIA. (first entry) WPI; 1999-257708/22. P-PSDB; AAY01520. JP11075871-A. 29-MAY-1998; 18-JUN-1997; 20-JUN-1997; -1999 23-MAR-1999 Gallus sp. 51;

a

X S

6 6 6 6 6 6 6 6 g

ò

g

 $\dot{\delta}$

8 8 8

음 상 음 8 8 8

면 장 연 8 8 8

원 장

```
1200
                                                                                                                                                                                                         1260
                                                                                                                                                                                                                                                                                                                                                           1380
                                                         1080
                                                                                      1140
                                                                                                                                                1200
                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                                                                                              CCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCCAATACCAGGCTGCCAG 1380
                                                                                                                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           deformans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chicken, C-11 protein, cell calcification inhibiting activity; cell calcification inhibiting agent; c-erg protein; arthritis deformans; ossification; spinal column ligament; ss.
                                                                                                        1081 CACTICGCTACTATGACAAAAATATTATGACTAAAGTTCATGGTAAAGGCTATGGCT
                                                                                                                                                                                                                                                                                                                                                           1321 cccrialiccanacigaanicaccaacigagggariciaccccaanaccaggcag
ACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGG
                                                                                                                                                ACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATCCA
                                                                                                                                                                 TGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGA
                                                                                                                                                                                                                                      reracaaaracccarcagaccrcccracargagrrccraccargcaccccccagaaga
                                                                                                                                                                                                                                                                      TGAACTITGTAGCTCCCCATCCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTTTGCTG
                                                                                                                                                                                                                                                                                                1261 igaacitigiagciccccaiccccigcitigccccgraaccicaiccagcititiscic
                                                                                                                                                                                                                                                                                                                                                                                                            CTCGGCGTTGGGGAGAGGAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTG
                                                CTCGGCGTTGGGGAGAGAGAAAGCAAAACTAACATGAACTATGACAACTCAGCCGTG
                                                                                      CACTICGCIACIACIAIGACAAAAIAITAIGACIAAAGIIICAIGGIAAACGCIAIGCCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           An active protein for inhibiting cell calcification - useful for measuring the calcification of a cell, for diagnosing arthritis or ossification of spinal column ligament.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
63. .1499
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00878177.
97US-0050297P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX26552 standard; DNA; 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98JP-00166076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding chicken c-erg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHUGAI PHARM CO LT
UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441 AAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441 AAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-257708/22.
P-PSDB; AAY01521.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP11075871-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gD.
                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                      1261
                                                             1021
                                                                                        1081
                                                                                                                                                  1141
                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                1321
   196
                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX26552;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CHUS ) (UYPE-) 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
AAX26552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
                                                                                                                유
                                                                                                                                                                       ď
                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                             8
                                                                                                                                               8
                                                                                                                                                                                                         ठे
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGG 1020
                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCA 960
                                                                                                                                                               120
                                                                                                                                                                                              120
                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGAACATTGATGGGAAAGGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rccagaacarreareseaaacarrereraaaaresecaaacarearerereaseace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cecceaecraraacecagararecrecrerecaeceraeacraecreaeagagagagagagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACTITIATITITICCAAATACATCAGTITACCCCAGAAGCAACGCAAAGAATAACAACAA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gradacadaracaderaredeadriceracidadecricididededededecrecaacidea 960
                                                                                                                                                                                                                                                        AGTGTGCCTACGGATCGCCCCCCTTGCAAAGACAGAATGACAGCCTCCTCTTCCAGTG 180
                                                                                                                                                                                                                                                                                                                                                                             cccceccaeaerraccarraaearesaereraacccaaaccaesrraaresercaaea 300
                                                                                                                                                                                                                                                                                                                                                                                                            ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                    AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGTGGACTGGACTGAAGGAGTATGGTCTTCCAGACGTGGACTTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCAGATTTACCTTATGAGCCAAGCGAGGATCAGCGTGGACGAGTCACAGCCATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAGTCAAAAGCTACCCAACCATCTTCAACAGTGCCCCAAAACAGAAGACCAGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               crcagreanageraceancearcarerrendadecechanagadadadecene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGA
                                                                                                                          GAATTCCGCGAACGAATAATTATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                               AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                  AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                  CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAATGAACGAAGAGTTATTGTGCCAGCAGCAGCTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCAGTGGCTGGAGGAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                        GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                          Gaps
                                                                          ô
                                             DB 2; Length 1447;
                 0 U; 0 Other;
                                                                          Indels
                                                                          ·,
                 Ë
                 C; 317 G; 316
                                           100.0%; Score 1447;
100.0%; Pred. No. 0;
ive 0; Mismatches
                 440 A; 374
                                                           Best Local Similarity 100.
Matches 1447; Conservative
                 BP;
                Sequence 1447
                                                                                                                                                                                              61
                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                               61
                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                             Query Match
```

ന

8 & 8 &

g

જે

d

δ

8 8 8

6 6 6 6 6

```
1020
                                                                                                                                                                                                                                                                                                                                                                                                                        1299
                                                                                                                                                                           1080
                                                                                                                961 GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u> actaticaciaaacticaccicicactriciciaactaticacaaaatattaticactaaag</u>
                                                                                                                                                                                                                                                                                                                              TTCATGGTAAACGCTATGCCTACAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCCAATACCAGGTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAAG
                                                                                                                                                                   TGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGCACAATGGGGAGTTCAAGA
                                                                                                                                                                                                                       CTCACCCTCCAGAATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                 GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC
                                                                                                                                                                                                     TGACAGACCCTGATGAAGTGGCTTCGGCGTTGGGGAGAGGGAAAAGCAAACCTAACATGA
                                                                                                                                                                                                                                                         ACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAAATATTATGACTAAAG
                                                                                                                                                                                                                                                                                                               TTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                        ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCCATCCCCCTTTTGCCCGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, splice variant, ERG, Ets, transcription factor, C-1-1, C-1-2, C-1-3, C-1-4, chondrocyte, articular chondrocyte, bone disease, cartilage disease, tumour, gene, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleotide sequence of human ERG splice variant C-1-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-1-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGGAAAGAAGAAAGCGCCAAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       splice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
67. 1446
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "ERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ68766 standard; DNA; 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003000724-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JAN-2003
                                                                                                                                                    940
                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                           1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1420
                                                                                                                                                                                                        1000
                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                            1060
                                                                                                                                                                                                                                                                                                                1120
                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                    1180
                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                               880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
ABZ68766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 4 5 6 6 6
                                  8 6
                                                                                                                8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                     5 B 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760 GGACGAGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGC 819
                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIGGGAIGAACIAIGGAAGCIACAIGGAAGAAGGAIAIICCGCCICCAAAIAIGACAA 420
                                                                                                                                                                                                                                                                                             AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTCACCTCATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGAAATG 360
                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                              9
                               also describes a chicken C-11 protein (AXVOISSO) which has cell calcification inhibiting activity and a cell calcification inhibiting activity and a cell calcification inhibiting agent containing c-erg protein. The proteins are used for measuring the calcification of a cell, for diagnosing arthritis deformans or ossification of spinal column ligament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATATGGGCAAACATCAAAGATGAGCCCGGGGGTTCCCCAGCAGGACTGGTATCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGGGATGAAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCGAGCTATAACGCAGATATCCTCCTGTCACCTACACTACCTCAGAGAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCGAGCTATAACGCAGATATCCTCTGTCACACCTACACTACCTCAGAGAGACTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721 ATGCTAGAAACACAGGAGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGGGAGGAGGATCAGCGT
                                                                                                                                                                                                                                                                                                                                <u> AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGTG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAATGAACGAAGATTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gecaeredecreseredesereaseserentesererrecasesereserenter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rccagaacarrigargggaaggrigrgraaaargaccaaagargacrirccagagacrca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TICCACATITIGACITICAGAIGAIGTIGAIAAAGGCCTIACAAAACICTCCACGGITAAAIGC
                                                                                                                                                                                                                       GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                            GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                           Gaps
                                                                                                                                                                                           81;
                                                                                                                                                                 Length 1528;
                                                                                                                                      Sequence 1528 BP; 464 A; 395 C; 330 G; 339 T; 0 U; 0 Other;
                                                                                                                                                                                           0; Indels
                                                                                                                                                                2;
                                                                                                                                                                 8
                                                                                                                                                              Ouery Match
93.7%; Score 1356; D
Best Local Similarity 94.7%; Pred. No. 0;
Matches 1447; Conservative 0; Mismatches
                 Disclosure; Page 8-9; 15pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           655
                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
```

8 6 B

음 성 6 6 6 6 6

```
TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA 613
                           554
                           à
                                                                                                                                                                                                                                                                                                                                                                                         The present sequence encodes splice variant C-1-1 of human ERG. ERG belongs to the Ers family of transcription factors. The specification describes C-1-1 (characterised by the absence of the 81 bp fragment, and the presence of the 218 bp and 72 bp fragments of the ERG-3 cDNA sequence); C-1-2 (characterised by the absence of the 81 bp and 218 bp acquence); C-1-3 (characterised by the absence of the 82 bp, 81 bp and 218 bp sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and 518 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 72 bp, 81 bp and 81 bp fragments of the ERG-3 cDNA sequence). The splice variant bp fragments of the ERG-3 cDNA sequence). The splice variant bp fragments of the ERG-3 cDNA sequence). The splice variant bp oplymucleotides are useful for stabilizing the phenotype of chondrocytes of differentiation of articular chondrocytes during in vitro culture expansion, for preventing or treating bone-related or cartilage-related consistence of progenitor cells of stable chondrocytes (ells expressing the progenitor cells of stable chondrocytes. Cells expressing the permanal
                                                                                                                                                                                                                                                       Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1509 BP; 389 A; 472 C; 359 G; 289 T; 0 U; 0 Other;
                                                                                                                                           Dell'accio F;
                                                                                                                                                                                                                                                                                                                                                   Claim 9; Fig 4; 60pp; English
  08-MAR-2002; 2002WO-EP002605
                                               2001US-0300756P.
                                                                                                                                         De Bari C,
                                                                                                                                                                                      WPI; 2003-221398/21
P-PSDB; ABP97695.
                                                                                            (TIGE-) TIGENIX NV
                                               25-JUN-2001;
```

```
74 TATTAAGGAAGCATTATCAGTGGTGAAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG 133
                                                                                                                                                                   218
                                                                                                                                                                                                      253
                                                                                                                                                                                                                          219 TTCCAAGATGAGCCCACGCGTCCCTCAGCAGATTGGCTGTCTCAACCCCCAGGCGAGGGT 278
                                                                                                                                                                                                                                                                                                          338
                                                                                                                                                                                                                                                                                                                                                                 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGGCGCTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAACATCGA 578
                                                                                                                                   ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGGGGCAAAC 193
                                                                                                                                                                                                                                                                      TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA 313
                                                                                                                                                                                                                                                                                                                                         314 CIGCAGOGIGGCAAAAGGAAGGAAAATGGITAGCAGTTCAGACAATGTTGGGATGAACTA 373
                                                                                                                                                                                                                                                                                                                                                                                                             374 IGGAAGCIACAIGGAAGAAAGCAIAITCCGCCICCAAAIATAIGACAACCAAIGAACGAAG 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGITATIGIGCCAGCAGAICCIACGITAIGGAGCACAAGACCAIGIACGGCAGIGGCIGGA 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GIGGGCAGIGAAGGAGIAIGGICIICCAGACGIGGACAICIIGIIGIIGCAGAACAIIGA 553
                                                                                       TATCAAGGAAGCCTTATCAGTTGTGTGTGAGGACCAGTCGTTGTTTGAGTGTGTGCCTACGG
                                                                                                                                                              AACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTATGGACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                             279 CACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGGAACTCTCCTGATGA
                                                                                                                                                                                                      194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                  Gaps
                                .
H
DB 8; Length 1509;
Query Match 68.7%; Score 994.4; DB 8; Length Best Local Similarity 84.1%; Pred. No. 0; Marches 1134; Conservative 0; Mismatches 211; Indels
                                                                                                    66
                                                                                                                                      134
                                                                                                                                                                     159
                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                            339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                    g
                                                                                                                                      ò
                                                                                                                                                            g
                                                                                                                                                                                             ò
                                                                                                                                                                                                                                 д
                                                                                                                                                                                                                                                              6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
```

Angiogenesis-associated human polynucleotide sequence #21 Human; angiogenesis-associated transcript; angiogenesis;

21-JAN-2003

XXXXXXXXX

ABX08759

y du	554	TGGGAAGAGTTGTGTAAATGACCAAGATGACTTCCAAGAGACTCGGCGGGGTTATAA 613
ò	614	CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGAG
дg	639	Secceacarectrororatororatacororadadadadadadororititàriti 698
ò	Ċ	
qq	σ	75
δλ	34	O)
qq	759	81
δ.	91	to t
d d	819	8.7
δ	851	
Dp	879	recrirateadatrerredaecaacaadradeedeecriracaaareeaggaggaggaggaggaggaggaggaggaggaggaggag
ζ	911	ACAGCTAIGGCAGITCCTACTGCAGGCTTCTGTCGGACCAGCTCCCAACTGCATCAC 970
ορ	939	ringscaenicciccisaasciccistosaacasciccaaciccascicaica
δ	971	CTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGAGGGCTCGGCGTTG 1030
qq	on.	THE THE STATE OF T
	_	GGGAGAGAAAAGCAAACCTAACATGAACTATGACAAAACTCAGCCGTGCACTTCGCTA 1090
	1059	111
ò	1001	CTACTATGACAAAAATTTATGACTAAAGTTCATGGTAAACGCTATGCCTACAAATTTGA 1150
ପ୍ର	1119	117
ò	1151	ITTCCACGGAATCGCTCAGGCCTCCAGCCTCCAGAATCATCCATGTACAAATA 1210
qq	1179	CTTCCACGGGATCGCCCAGGCCCTCCACCCCCCGGAGTCATCTCTGTACAGTA 1238
č	1211	CCCATCAGACCTCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTTGT 1270
	1239	CCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCACCAGAGAAGAAGAATGTTTGT 1298
8	1271	AGCICCCATCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCCCCTAATCC 1330
qq	1299	36CGCCCCACCTCCAGCCCTCCCGGGACATCTTCCAGTTTTTTGCTGCCCCAAACCC 1358
λ0	1331	AIACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTAT 1390
Dp	1359	ATACTGGAATTCACCAACTGGGGGTATATACCCCAACACTAGGCTCCCCACCACATAT 1418
λõ	391	GCCTTCCCATCTTGGCACCTACTAA 1418
qq	σ	sccricricalcredecacriaciaa 1446
RESULT 4 ABX08759 ID ABX0875	0	standard; cDNA; 1389 BP.

332 433 493 452 553 512 613 572 664 632 724

```
573 GGCCGACATCTTCTCTCACATCTCCACTACCTCGAGAGACTCCTTCCACATTTGAC
                                                                                                                                                393 AGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          753 CCAGTCGAAAGCTGCTCCACCATCCCTTCCACAGTGCCCAAAACTGAAAGACCAGGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            273 ATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCCCAGACACCGTTGGGATGAACTA
                                      374 TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAAGAAG
                                                                     GTGGCCGTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAACATCGA
                                                                                                                                                                                                                                                                                       TGGGAAAGAGTIGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                              CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGATTTACCTTATGAGCAAGCGAGGAGCATCAGCGTGGACGAGTCACAGCCATCCCA--C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGATTTACCATATGAGCCCCCCAGGAGATCAGGCTGGACGGCTCACGGCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACACTAGGCTCCCCAC
                                                                                                                       AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                         GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITITITITICCAAATACATCAGTITACCCAGAAGCAACGCAAAGAATAACAACAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   782 TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        933 CTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1022 TCGGCGTTGGGGAGGAAAGCAAAGCTAACATGAACTATGACTATGACTGGGCGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  993 CCGGCGCTGGGGGAGGGGAAGAGCAAACCCAACATGAACTACGATAAGCTCAGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1233 ĠAAĊTŤIGTGGCGCCCACCACCACCCCCGGGGGACATCTTCCAGTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTCGCTACTACTATGACAAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gaactitigragerececateceeragerringeeegraagereareeageringingeerge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTCATATGCCTTCCCATCTTGGCACCTACTAA 1418
CAGCCATATGCCTTCTCATCTGGGCACTTACTAAA 1389
                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                                                                                                                                       665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                633
                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1293
                                                                                333
                                                                                                                         434
                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1353
                                                                           d
                                                                                                                       8 8
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        රු සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                      ò
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to methods and compositions for detecting an angiogenesis-associated transcript in a cell in a patient. The method involves contracting a biological sample from the patient with a polynucleotide that selectively hybridises to a sequence at least 80% identical to any of the angiogenesis-associated human polynucleotide sequences given in the specification. These angiogenesis-associated polynucleotide sequences comprise genes that exhibit changes in expression levels as a function of time in tissue undergoing expression levels as a function of time in tissue undergoing in expression levels as a function of time in the sequences of the invention are useful for diagnosing and treating angiogenesis and angiogenesis-associated diseases e.g. cancer. The polynucleotide sequences continued to the properties of the sequences are also useful in the gene therapy of such disorders. The sequences are useful as a vaccine for therapeutic and prophylactic immunisation.

ABX08739-ABX08853 represent angiogenesis-associated polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting angiogenesis-associated transcript in a cell for diagnosing and treating cancer by contacting a sample with a polynucleotide that exhibits changes in expression level as a function of time in tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92
  therapy; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CIGCAGCGIGGCAAAAGGGAGGAAAATGGITAGCAGITCAGACAAITGTIGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATCAAGGAAGCCTTATCAGTTGTTGTGAAGAGCCAGTCGTTGTTTGAGTGTGCCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       153 TICCAAGAIGAGCCCACGCGTCCCTCAGCAGGAITGGCTGTCTCAACCCCCAGCCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACCATTAAGATGGAGTGTAACCCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGGAACTCTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAAAGATGAGCCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63.6%; Score 921; DB 7; Length 1389; larity 81.1%; Pred. No. 6.5e-292; Conservative 0; Mismatches 245; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1389 BP; 359 A; 440 C; 323 G; 267 T; 0 U; 0 Other;
disease; cancer; cytostatic; gene
                                                                                                                                                                                                                                                                                                                                                                                                            Aziz N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 200; 291pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                              Watson SR,
                                                                                                                                                                                                                      14-FEB-2001; 2001US-00784356.
22-FEB-2001; 2001US-00791390.
19-AFR-2001; 2001US-0285475P.
3-AUG-2001; 2001US-0310025P.
13-NOV-2001; 2001US-0350666F.
29-NOV-2001; 2001US-0334244F.
                                                                                                                                                                                                                                                                                                                                                                  (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                 2002WO-US004915
angiogenesis-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            undergoing angiogenesis
                                                                                                                                                                                                                                                                                                                                                                                                            Glynne R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-040681/03.
P-PSDB; ABU03476.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                 WO200279492-A2
                                                                                                                                                                                 14-FEB-2002;
                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Sımı
Matches 1100;
                                                                                                                                          10-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                            Murray R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sednences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
```

1112

1201

1141

1081

1021

992

692 781 752

812

841

872 961 932

901

1172

1261

g &

ò

6 6 6 6 6

1292

TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG

74

```
요
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     જે
                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                ò
원장
                                                         g &
                                                                                                               용
                                                                                                                                                  ò
                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                    ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method for detecting a lung cancer-associated transcript in a cell from a patient, comprising contacting a biological cample from the patient with a polymucleotide that selectively hybridises to a sequence that is at least 80 % identical to a gene that exhibits in cassociated polymucleotide sand polypeptides are used for identifying a compound that modulates a lung cancer-associated for identifying a compound that modulates a lung cancer-associated for identifying a compound that modulates a lung cancer-associated for identifying a concound that modulatory compound identified. The methods are useful considering a modulatory compound identified. The methods are useful contracting a modulatory compound identified. The methods are useful contracting a modulatory compound identified. The methods are useful contracting an or other benign or precancerous lessions, e.g. atelectasis, emphysema, bronchitis, chronic obstructive pulmonary disease, fibrosis, hypersensitivity pneumonitis, interstitial pulmonary disease, fibrosis, bronchiectasis . The genes, polymucleotides and polypeptides are useful compounds that modulate lung cancer, such as antibodies. Sequences
                                                                                                                                                  Lung cancer-associated polynucleotide; gene; ds; cytostatic; emphysema; antiinflammatory; antiasthmatic; non-small cell lung cancer; atelectasis; small cell lung cancer; benign lession; procancerous lesion; bronchitis; chronic obstructive pulmonary disease; hypersenaitivity pneumonitis; interstitial pulmonary fibrosis; fibrosis; asthma; bronchiectasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detecting a lung cancer-associated transcript in a cell from a patient for treating lung cancer, by contacting a biological sample from the patient with a polynucleotide that exhibits increased or decreased expression in lung cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX76124-ABX76474 represent lung cancer-associated polynucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G; 713 T; 0 U;
                                                                                                                         cancer-associated polynucleotide #159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 22; Page 310-311; 453pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; 768
                                        BP.
                                                                                                                                                                                                                                                                                                                                                       18-APR-2001; 2001US-0284770P.
10-MAY-2001; 2001US-0290492P.
09-NOV-2001; 2001US-0339245P.
13-NOV-2001; 2001US-0334370P.
29-NOV-2001; 2001US-0334370P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EOSB-) EOS BIOTECHNOLOGY, INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; 770
                                        ABX76295 standard; DNA; 3166
                                                                                                                                                                                                                                                                                                                               2002WO-US012476
                                                                                              (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3166 BP; 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-093161/08.
P-PSDB; ABU56566.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aziz N, Murray
                                                                                                                                                                                                                                                                      WO200286443-A2
                                                                                                                                                                                                                                                                                                                               18-APR-2002;
                                                                                                                                                                                                                                           Unidentified
                                                                                               02-APR-2003
                                                                                                                                                                                                                                                                                                   31-OCT-2002
                                                                     ABX76295
                                                                                                                            Lung
                          RESULT
```

,, (7

Gaps

12;

Length 3166;

Score 921, DB 7, Length 31 Pred. No. 1.1e-291, 0, Mismatches 245, Indels

Query Match
Best Local Similarity 81.1%;
Matches 1100; Conservative

```
1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCAGAATCATCCAT 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             948
                                                                        408
                                                                                                        253
                                                                                                                                    468
                                                                                                                                                                    313
                                                                                                                                                                                                  528
                                                                                                                                                                                                                                 373
                                                                                                                                                                                                                                                               588
                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                          708
                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                      768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   664
                                             193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcagiragarccitarcagarrcirgaaccaacaagragccgccirgcaaarccaggcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                résccadarccadetrréscadricérecretadaderecretéresacadetecadetecad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1082 ACTTCGCTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccrcccrracracrateacaaeacarcareaceaaeerccareeeaaececracecra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGGCGTTGGGGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGGTCACGGCCACCCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1009 CCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAAGACCAGCGTCC
                                                                                                                                                                                                                                                   TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCGGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               769 TGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCCCAGCTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         829 GGCGACATCTTCTCTCACATCTCCACTACCTCAGAGAGACTCCTCTTCCACATTTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             889 Trcagargargrrahaagccrracaaaacrcrccacggrraargcargcragaaacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTTACCTTATGAGCAAGGAGAATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGTCAAAAGCTACCCCAACCATCATCTTCAACAGTGCCCAAAAACAGAAGACAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAG
ATCGCCCCACCTTGCAAAGACACAGAAATGACAGCCTCCTCTTCCAGTGAATATGGGCAAAC
                                                                      ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                              TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                          314 CTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                             TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                             AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grececteraladalariandecerrecadacercalcaretrerrariecadalacareda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142
                                                                                                                                        409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      962
                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           554
                                               134
                                                                             349
                                                                                                           194
                                                                                                                                                                        254
                                                                                                                                                                                                    469
                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                           709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        614
                  583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

```
The invention relates to newly discovered cancer markers associated with the cancerous state of prostate cells. Also disclosed is a method of assessing whether a patient is afflicted with prostate cancer. The method of the invention involves assessing whether a patient is afflicted with prostate cancer by comparing the level of expression of a marker in a control non-prostate cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal level of expression of the marker in the patient sample and the normal control non-prostate cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal cancer, and may be useful in gene therapy. Sequences given in ADBASTJ7-ADBAS541 represent marker cDNA and proteins. Note: The sequence cancer data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the vibo.int/pub/published_pot_sequences.
CAAGTTCGACTTCCACGGGATCGCCCAGGCCCTCCAGCCCCACCCCCGGAGTCATCTT 1428
                                                   1261
                                                                                   1488
                                                                                                                    1321
                                                                                                                                                                                      1381
                                                                                                                                                                                                                      CCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACTAGGCTCCCCAC
                                                                                                                    GAACTITIGIAGCICCCCATCCCCCTGCTTTGCCCCGTAACCICAICCAGCTTTTTGCTGC
                                                                                                                                                   1489 GAACTTTGTGGGGGGCCCACCCTCCAGCCCTCCCGGGACATCTTCCAGTTTTTTGCTGC
                                                                                                                                                                                      CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC
                                                 GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                            GTACAAGTACCCCCTCAGACCTCCGTACATGGGCTCCTATCACGCCCCACAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid molecule, useful for diagnosing or treating prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gorbatcheva
Anderson D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prostate; cancer; cytostatic; gene therapy; marker; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO, Gannavarapu M,
I, Glatt K, Zhao X,
                                                                                                                                                                                                                                                                             CAGCCATATGCCTTCTCTGGGCACTTACTACTAA 1645
                                                                                                                                                                                                                                                         1382 TGCTCATATGCCTTCCCATCTTGGCACCTACTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 98; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , Endege WO Wonsey AM,
                                                                                                                                                                                                                                                                                                                                                                               ADB75274 standard; cDNA; 3166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JUL-2001, 2001US-0307982P.
22-MUG-2001, 2001US-0314356P.
25-SEP-2001, 2001US-0352020P.
12-DEC-2001, 2001US-03411465.
05-MAR-2002, 2002US-0362158P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-JUL-2002; 2002WO-US023913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer marker cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R, Monahan JE,
, Kamatkar S, W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-248033/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003009814-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schlegel R.
Hoersh S,
                1369
                                                   1202
                                                                                                                    1262
                                                                                                                                                                                      1322
                                                                                                                                                                                                                      1549
                                                                                                                                                                                                                                                                                                                                                                                                              ADB75274;
                                                                                                                                                                                                                                                                                                                                           RESULT 6
ADB75274
                                                                                                                                                                                                                                                                                                                                                                               8
                                                                       ያ ያ
                                                                                                                                          셤
                                                                                                                                                                         5 6
                                                                                                                                                                                                                                                                                 Q
Q
                                                                                                                                                                                                                                                  8
```

```
1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1128
                                                                                                                    ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rescensarce acertres castrocreeres as a consequence and a consequence of the consequence 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGGCGTTGGGGAGAGAGGAAAGCAAACCTAACATGAACTATGACAAACTCAGCGTGC 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                       133
                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                   408
                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                     468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rarcaaggaagccrrarcagrrergagreagagagccagrcerrerraagrergccracge
                                                                                                                                                                                                                                                                                                           349 AACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCTGCGGGACTATGGACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469 CACCATCAAAATGGAATGTAACCCTAGGCGGGTGAATGGCTCAAGGAACTCTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AridcaGrigideccaaadeccedaaagardareccedeccedeccedrigearcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGAAAGAGTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATTTACCTTATGAGCAAGCGAGGATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1009 ccadricaaaadcrecreaaccarcrecriceacadadeccaaaacreaadaccadedrec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1069 reagrinagarecrinareagarierregaceaacaagrageegeerrecaaareeage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATTAAGGAAGCATTATCAGTGGGGGGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                      134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                     194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                     254 TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCAGCGTGGCAAAAGGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITIAITITICCAAAIACAICAGITIACCCAGAAGCAACGCAAAGAAIAACAACAAGGCC
                                                                                                                 Gaps
                                                                                                                    12;
                                                                       Length 3166;
                     713 T; 0 U; 0 Other;
                                                                                                                    Indels
                                                                  Score 921; DB 9; I
Pred. No. 1.1e-291;
0; Mismatches 245;
                       Sequence 3166 BP; 915 A; 770 C; 768 G;
                                                                  Query Match
Best Local Similarity 81.1%;
Matches 1100; Conservative (
                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1022
                                                                                                                                                                                                                                                                                                                                                                                                                        409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   962
XX S
                                                                                                                                                                       à
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

ω

```
1368
                                                                                                                                                                                                          1428
                                                                                                                                                                                                                                                                                                               1488
                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
CCGGCGCTGGGGAGAGGGAAGAGCCAAAACCCAACATGAACTACGATAAGCTCAGCCGCGC 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence encodes splice variant C-1-2 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the 81 bp fragment, and the presence of the 218 bp and 72 bp fragments of the ERG-3 cDNA
                                                                                                     GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                       GAACTITGTAGCTCCCCATCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTTTGTGGGGGCCCCCCCCCCCCCGGGACATCTTCCAGTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCCAATACCAGGCTGCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCAGGAATCATCCAT
                                                  ACTICGCIACIACIAIGACAAAAIAITAIGACIAAAGIICAIGGIAAACGCIAIGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; splice variant; ERG; Ets; transcription factor; C-1-1; C-1-2; C-1-3; C-1-4; chondrocyte; articular chondrocyte; bone disease; cartilage disease; tumour; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleotide sequence of human ERG splice variant C-1-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "ERG splice variant C-1-2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTCATATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ū
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
146. .1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dell'accio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Fig 5; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-2001; 2001US-0300756P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ68767 standard; DNA; 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-MAR-2002; 2002WO-EP002605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            De Bari C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-221398/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TIGE-) TIGENIX NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; ABP97696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003000724-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Luyten F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1609
1249
                                                                                                     1309
                                                                                                                                                                                                                                                                                                                                                                                                                       1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1322
                                                  1082
                                                                                                                                                       1142
                                                                                                                                                                                                             1369
                                                                                                                                                                                                                                                               1202
                                                                                                                                                                                                                                                                                                               1429
                                                                                                                                                                                                                                                                                                                                                                     1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AB268767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7

ABZ68767

ID AABZ68767

ID AABZ6876

ID AABZ68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                         g
                                                                                                                                         8
                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                          ò
                                                                                                                                                                                                                                         à
```

```
1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGAAGTGGCTCGGCGTTGGGGAGAGAGAAAGCAAACCTAACATGAACTATGACAAA 1070
                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880
                                           by
81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    760
                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       700
                                                                                                                                                                                                                                                                                                                                                                                               413
                                                                                                                                                                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                520
sequence); C-1-2 (characterised by the absence of the 81 bp and 218 bp fragments, and the presence of the 72 bp fragment of the ERG-3 cDNA sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and 218 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 218 bp fragment, and the presence of the 72 bp and 81 bp fragments of the ERG-3 cDNA sequence). The splice variant polynucleotides are useful for stabilizing the phenotype of chondrocytes or cells with a chondrocytes-like phenotype, for preventing dedifferentiation of articular chondrocytes during in vitro culture diseases or Ets-related gene associated tumour, or as marker of progenitor cells of stable chondrocytes. Cells expressing the
                                                                                                                                                                                          ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAACTCCAACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          progenitor cells of stable chondrocytes. Cells expressing the polynucleotide are useful for producing or repairing cartilage tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCCCA---CTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCCAAAACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581 caccecedececedaricaaagerecrearerererrecrireaeagreceaaaaereaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATICCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                              cacaccerroccaridaacraccececracarecaccacaacaacacareccacacaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrerrarrecagaacaregargggaaggaacrerecaagargaccaaggacgacrrecag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   461 AGGGGGGGGGGTTTTATTTTCCCAAATACTTCAGTATATCCTGAAGCTACGCAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           521 ACAACTAGGCCAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACGGCGGTCACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641 GACCAGCGTCCTCAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                                   TCAAGGAATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCA
                                                                                                                                                                                                                                                                                                                                                                 rcaaccacreretearcaarceacrereceaaacceaaaacceaaaaarceceaacaacce
                                                                                                                                                                                                                                                                                                                                                                                               GACAATGTTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCATATTCCGCCTCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGACAACCAATGAACGAAGAGTTATTGTGCCAGCAGAGTCCTACGTTATGGAGCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TICITICITICCAGAACATTGATGGGAAAGAGTTGTGTAAAAATGACCAAAAGATGACTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  401 AGGCTCACCCCAGCTACAACGCCGACATCCTTCTCTCACATCTCCACTACCTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                714 ACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGC
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                   3;
                                                                                                                                                                                                                                                                   57.6%; Score 833.6; DB 8; Length 1291; 84.3%; Pred. No. 3.9e-263; ive 0; Mismatches 174; Indels 3;
                                                                                                                                                                                                                                      Sequence 1291 BP; 334 A; 409 C; 302 G; 246 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                     Best_Local Similarity 84.3 Matches 951; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1011
                                                                                                                                                                                                                                                                                                                                      294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       654
                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                   354
                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              831
                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                               414
                                                                                                                                                                                                               mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

თ

```
810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               990
                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                  mammal
    88666666666666888
                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dp
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                    1250
                                                                                    1190
                                                                                                                            1000
                                                                                                                                                                                                          1060
                                                                                                                                                                                                                                                    1310
                                                                                                                                                                                                                                                                                            1120
CTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAA 1130
                                                                                                                                                                                                                                                                                                                                  TITITIGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACC 1370
                                                                                                                                                                                                                                                                                                                                                                            1121 TTTTTTGCTGCCCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACT 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence encodes splice variant C-1-4 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the 81 bp fragment, and the presence of the 218 bp and 72 bp fragments of the ERG-3 cDNA sequence), C-1-2 (characterised by the absence of the 81 bp and 218 bp fragments, and the presence of the 72 bp fragment of the ERG-3 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel splice variants of the Ets-related gene (BRG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                        GAGTCATCTGTACAAGTACCCCTCAGACCTCCGTACATGGGCTCCTATCACGCCCAC
                                                                               CGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGGCCTCACCCTCCA
                                                                                                                       cachácacchácaaghneaachneaachneacaneacheacachacaccaccacce
                                                                                                                                                               GAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACAC
                                                                                                                                                                                                                                                    CCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGC
                                                                                                                                                                                                                                                                            CCACAGAAGATGAACTITGTGGGGGCCCCACCCTCCAGCCCTCCCGTGACATCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, splice variant, ERG; Ets; transcription factor; C-1-1; C-1-2;
C-1-3; C-1-4; chondrocyte; articular chondrocyte; bone disease;
cartilage disease; tumour; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCTGCCAGCTCCTATATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleotide sequence of human ERG splice variant C-1-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/product= "ERG splice variant C-1-4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ľ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
146. .1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dell'accio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 112; Fig 7; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ68769 standard; DNA; 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-MAR-2002; 2002WO-EP002605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JUN-2001; 2001US-0300756P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 De Bari C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-221398/21.
P-PSDB; ABP97698.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TIGE-) TIGENIX NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003000724-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Luyten F,
                                                                                                                       941
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1181
                                                                                                                                                                                                                                                  1251
                                                                                                                                                                                                                                                                                          1061
                                                                                                                                                                                                                                                                                                                                    1311
                                                                                                                                                                                                                                                                                                                                                                                                                    1371
                                                                               1131
                                                                                                                                                                                                          1001
                                     881
                                                                                                                                                               1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABESULT 8
ABZ68769
AB
                            q
                                                                       \dot{\circ}
                                                                                                          g
                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                    ò
                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
```

```
GAGTICAAGAIGACAGACCCIGATGAAGIGGCICGGCGTIGGGGAAGAGAAAAGCAAA 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and the absence of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 218 bp fragment, and the presence of the 72 bp and 81 bp fragments of the ERG-3 cDNA sequence). The splice variant polynucleotides are useful for stabilizing the phenotype of chondrocytes or calls with a chondrocytes-like phenotype, for preventing december of articular chondrocytes during in vitro culture expansion, for preventing or treating bone-related or cartilage-related glacases or Ets-related gene associated tumour, or as marker of progenitor cells of stable chondrocytes. Cells expressing the polynucleotide are useful for producing or repairing cartilage tissue in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161 GACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACATGCCACCCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101 reaassaacrerersarsaarseassesesesaassessaassaarsesesesaassa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221 ATGACCACGAAACGAGGGAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         281 CATGTGCGGCAGTGGCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  401 AGGCTCACCCCCAGCTACAACGCCGACATCCTTCTCACATCTCCACTACCTCAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GAGGAGCCACTTTATTTTTCCAAATACATCAGTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGACCAGCAGCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 761 CCAACAAGTAGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                294 TCAAGGAATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                414 ATGACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGTACGGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               534 ITGTTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  341 TTGTTATTCCAGAACATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGACTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461 ACTCCTCTTCCACATTTGACTTCAGATGATGTTGATAAAGCCTTACAAAACTCTCCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGAAGCAACGCAAAGAATAACAAGACCCAGATTTACCTTATGAGCAAGCGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581 ccreaagcraccaaagaarracaacragccagarrraccarargagcccccaggaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGCGTGGACGAGTCACAGCCATCCCACT - - - CAGTCAAAAGCTACCCAACCATCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAACAGTGCCCAAAACAGAGACCAGCTCCTCAGTTAGATCCTTATCAGATTCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             84;
                                                                                                                                                                                                                                                                                                                                                                                                  Score 742.6; DB 8; Length 1372;
Pred. No. 3.8e-233;
0; Mismatches 174; Indels 84;
                                                                                                                                                                                                                                                                                                                                                    Sequence 1372 BP; 359 A; 430 C; 314 G; 269 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                          51.3%;
78.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 78.7
Matches 951; Conservative
```

```
The present sequence encodes splice variant C-1-3 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the 81 bp fragment, and the presence of the 18 bp fragment of the ERG-3 cDNA cracterised by the absence of the 81 bp and 218 bp fragments, and the presence of the 72 bp fragment of the ERG-3 cDNA sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and CC 218 bp fragments of the ERG-3 cDNA sequence); A-1-4 (characterised by the absence of the 72 bp, 81 bp and CC 218 bp fragments of the ERG-3 cDNA sequence). The splice variant bp fragments of the ERG-3 cDNA sequence). The splice variant conductorises are useful for stabilizing the phenotype of chondrocytes or cells with a chondrocytes furing in vitro culture differentiation of articular chondrocytes during in vitro culture expansion, for preventing or treating bone-related or cartilage-related conductorytes function case marker of progenitor cells of stable chondrocytes. Cells expressing the progenitor cells of stable chondrocytes. Cells expressing the magnetic are useful for producing or repairing cartilage tissue in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           carerecescastrescresastrescereatastastararescerrecastescereatare 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       354 GACAATGTTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGACCACGAACGAGCGAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGITGITCCAGAACATIGATGGGAAAGAGTIGIGIAAAATGACCAAAGAIGACTICCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   714 ACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGAGTCAGGCGTGGACGAGGAGTCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        569 GACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAACTCCAACTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIGITATICCAGAACATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGGAGCCACTTTTTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCCCA---CTCAGTCAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCTCACCCCCAGCTACAACGCCGACATCCTCTCTCACATCTCCACACTACCTCAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACCAGOGICCICAGITAGAICCITAICAGAITCITGGACCGACCAGCAGCGTCITGCA
                                                                                                                                                                                                                                                                                                                                                                                                    TCAAGGAATTCACCTGATGACTGCAGGGGGAAAAGGAGGAAAATGGTTAGCAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCCAGGCCAGTGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                       Sequence 1219 BP; 312 A; 393 C; 288 G; 226 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                   Query Match
48.3%; Score 698.8; DB 8;
Best Local Similarity 79.0%; Pred. No. 9.6e-219;
Matches 891; Conservative 0; Mismatches 162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                                                      294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            689
                                                                                                                                                                                                                                                                          mammal
      8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             면
경
경
면
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                    CCCAACATGAACTACGATAAGCTCAGCCGCCCTCCGTTACTACTATGACAAGAACATC 1000
                                                                                              ATGACTAAAGTTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAG 1169
                                                                                                                           1001 ATGACGAAGGTCCATGGGAAGCGCTACGCCTACAAGTTCGACTTCCACGGATCGCCCAG 1060
                                                                                                                                                            GCCCTCCAGCCTCACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTAC 1229
                                                                                                                                                                                     GCCCTCCAGCCCCACCCCCGGAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTAC 1120
                                                                                                                                                                                                                       1230 ATGAGTICCIACCAIGCACACCCCCAGAAGAIGAACTITGIAGCICCCCAICCCCCIGCI 1289
                                                                                                                                                                                                                                                     1290 TIGCCCGTAACCTCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACT 1349
                                                                                                                                                                                                                                                                                                                      GGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACC 1409
                                   CCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATT 1109
                                                                                                                                                                                                                                                                                                                                                                                     1241 GGGGGTATATACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACT 1300
     GAGTICAAGATGACGGATCCCGACGAGGTGGCCCGGCGCTGGGGAGAGAGCGGAAA 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, splice variant, ERG; Ets, transcription factor, C-1-1, C-1-3; C-1-4; chondrocyte, articular chondrocyte, bone disease, cartilage disease; tumour, gene, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleotide sequence of human ERG splice variant C-1-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product= "ERG splice variant C-1-3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dell'accio F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 11; Fig 6; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-MAR-2002; 2002WO-EP002605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA; 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-JUN-2001; 2001US-0300756P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                      |||||||||||
TACTACTAA 1309
                                                                                                                                                                                                                                                                                                                                                                                                                   TACTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 De Bari C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-221398/21.
P-PSDB; ABP97697.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ68768 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TIGE-) TIGENIX NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003000724-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Luyten F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1301
                                                                                              1110
                                                                                                                                                            1170
                                                                                                                                                                                            1061
                                                                                                                                                                                                                                                       1121
                                                                                                                                                                                                                                                                                                                                                      1350
                                                                                                                                                                                                                                                                                                                                                                                                                     1410
     881
                                   1050
                                                                941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ68768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                ò
                                                       D,
                                                                                   à
                                                                                                                      요
                                                                                                                                                8 8 8
                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                   ₹
                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

3

Gaps

75;

Indels

Length 1219;

160 413 220 473 280

533

593 400 653 460 713 461 773 508 1010

748

950

689

830

```
352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    537
                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            412
                                                                                                                                                                                       Query Match
                                                                                                                                                                                                 Best Local
Matches 91
 888888888888888888888888
                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                  S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \overset{\sim}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                              1130
                                                                                          1190
                                                                                                                                                                                      1310
                                                                                                                                         1250
GATGAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAA 1070
                                                                                                                                                                                                        TITITIGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACC 1370
                                                                                                                                                                                                                                                      1049 ITITITICIGECCCCAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACT 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to recombinant carcinoma associated (CA) nucleic acid sequences from mouse and human (ADA01482-ADA03094), and to recombinant carcinoma associated proteins (CAP) encoded by them. The invention also encompasses expression vectors and host cells comprising a CA nucleic acid, a polypeptide (especially an antibody) that specifically binds to the protein, and a biochip comprising CA nucleic acid or fragments thereof. The sequences of the invention were identified using encogenic retroviruses, which insert into the genome of the host organism at random. Many of these do not carry transduced host oncogenes or
                                                                     868
                                                                                                                 928
                                                                                                                                                              988
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse; murine; carcinoma associated; oncogene; carcinoma; cancer; breast; prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
                                                            <u>GACGAGGTGGCCCGGCGCTGGGGGGGGGGAAGAGCAAAACCAACATGAACTACGATAAG</u>
                                                                                         CGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCA
                                                                                                              cectacecctacaagitceaciticaceegarceccaeeccrecaecccaecccae
                                                                                                                                      GAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACAC
                                                                                                                                                              GAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCAC
                                                                                                                                                                                     CCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCCGTAACCTCATCCAGC
                                            CTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant nucleic acid encoding carcinoma associated protein, ul for preparing compositions for treating carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Flil carcinoma associated coding sequence, SEQ ID NO:1207
                                                                                                                                                                                                                                                                                  AGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTACTAA 1418
                                                                                                                                                                                                                                                                                                       1109 AGGCTCCCCACCACCATATGCCTTCTCATCTGGGCACTTACTACTAA 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 1207; 245pp; English.
                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                ADA02689 standard; cDNA; 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-DEC-2002; 2002WO-US041414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-DEC-2001; 2001US-00035832
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-587068/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003057146-A2
                                                                                                                                                                                                                                                                                                                                                                                                                 06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morris DW;
                                                                                                               869
                                                                                                                                                                                                                                                                                  1371
                                                                                                                                                                                     1251
                                                                                                                                                                                                                                  1311
                     749
                                            1071
                                                                   809
                                                                                         1131
                                                                                                                                      1191
                                                                                                                                                             929
                                                                                                                                                                                                           989
                                                                                                                                                                                                                                                                                                                                                                                         ADA02689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful
                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New
                                                                                                                                                                                                                                                                                                                                                    ДÇ
                 g
                                                                                                                                                                                  δ
                                                                                                                                                                                                         g
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                         셤
                                          ò
                                                            q
                                                                                   à
                                                                                                            g
                                                                                                                                à
                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                 g
```

```
pathogenic trans-acting viral genes, meaning that cancer incidence is a proteor consequence of the effects of proviral integration into host proteoncogenes. The CA mucleic acid sequences can be used to diagnose carcinoma (especially breast cancer, prostate cancer, lymphoma or leukaemia) or a propensity to carcinoma by determination of the sequence of a CA game, or by determination of CA gene expression in particular tissues. CA mucleic acids, proteins and antibodies are also useful as therapeutic agents and in screening and evaluating drug candidates. The present sequence represents a specifically claimed murine CA nucleic acid sequence of the invention. Note: The complete sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123 TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGT 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rerecercaacaaaagreerecetrogaggareacagaccargggcaagaacaergag 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 GÁCTÁCGGGCÁGCCCCACAAAATCAACCCCTGCCACGCÁGCAGGAGTGGATCAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232 gagrerecegregaerecaererecaerareraecaaeerecregregedegaesegaaeee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaccccaiteaacialaanadciacaiteandadadaadaacecccccccicciccaacaite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCACCAACGAACGAGAGTCATTGTGCCTGCAGACCCCACACGTGGACACAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTACGGCAGTGGCTGGAGTGGCCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTCGACAGTGGGCTGGAGTATAAAGGAATACGGATTGATGGAGATTGACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACA---GC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     774 CATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240 CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 CC-----AGTGAGAGTCAATGTCAAGCGGGAGTATGACCACATGAATGGATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360 GITGGGATGAACTATGGAAGCTACATGGAAGAAGCA---TATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     472 TTCTTCCAGAACATGGATGGCAAGGAATTGTGTAAAATGAACAAGGAGGACTTCCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----TICACIGCIGGCCIATAACACACCICCCATACAGACCAGICCICACGACTGAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grchaggahdaccerrerrardacaereaddadaddacarddaachararardaad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1359;
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1359 BP; 367 A; 398 C; 331 G; 263 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39.4%; Score 570.2; DB 8; 66.8%; Pred. No. 2.4e-176; vative 0; Mismatches 423;
                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ll Similarity 66.8
917; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

9

122

09

120

239 180 299 231 359 416

351

291

536

411

296 531 959 590 716 645 773 705 833 765 893

```
ACAACCAATGAACGAAGACTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel recombinant nucleic acid comprising a nucleotide sequence selected from any of the 600 sequences fully defined in the specification. A polymucleotide of the invention has cytostatic activity, and may have a use in gene therapy, or in a vaccine. The recombinant nucleic acids and polympeptides are useful for treating carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and sarcomas. The present sequence represents a mouse cDNA of the invention.
  useful for treating carcinomas, lymphomas,
                                                                                                                                                                                                                                                                                                                                                                                                                121 dactaccededesececededadredacecerecenecedesedededededededese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300 AATICACCIGAIGACIGCAGCGIGGCAAAAGGAGGGAAAAIGGIIAGCAGIICAGACAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 232 GAGTCTCCGGTGGACTGCAGTGTCAGCAAATGTAACAAGCTGGTGGGCGGAGGCGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            292 AACCCCATGAACTATAATAGCTAGATGAGAAGAAGAAGAACGCCCCCTCCTCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTACGGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----Treacregeceraracacaacerecearacaaaceagecereceaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           774 CATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCCAAAACAGAACAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               657 GGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAAGGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcascaracedacedecedererececaadecasarareaerrecerregeagaereer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATATGGGCAAACATCAAAGATGAGCCCGGGGGTTCCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----agreagagreatgreagecageagratgaccacargaardgarccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         646 grczadgazdacerrcirardacrergrczdgagagagdardardaranarana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     706 TCTGGCCTCAACAAAGTCCTCTTCGAGGATCACAGACCATGGGCAAGAACACTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCA---TATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACA---GC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gecacerececeradadadadagrecrerreredaderecreaceraderedadadade-
                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                         33;
                                                                                                                                                                                                                                                                                                                            Length 1359
                                                                                                                                                                                                                                                                                     Sequence 1359 BP; 367 A; 398 C; 331 G; 263 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                          Score 570.2; DB 9;
Pred. No. 2.4e-176;
0; Mismatches 423;
                         cancers, neoplasm, adenocarcinoma, or sarcomas.
                                                              English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGTTCCAGAACATTGATGGGAAAGAGTT
                                                              SEQ ID NO 255; 2304pp;
    recombinant nucleic acid,
                                                                                                                                                                                                                                                                                                                                 39.4%;
                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 66.8
Matches 917; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      834
                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               591
                                                                                                                                                                                                                                                                                                                                 Match
  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                     8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                           1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1305
                                                                                                                                                                                                                                                                                   GAGGIGGCCAGGCGCTGGGGAGAGCGGAAGCCCAACAIGAATTAIGACAAGCIG 1005
                                                                                                                                                                                                                                                                                                                                                      AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAGTGCATGGCAAAAGG 1065
                                                                                                                                                                                                                                                                                                                                                                                                                   TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCAGGA 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATGCCTACAAGTTTGACTTCCATGCATTGCCCAGGCCCTGCAGCCATCCAACAGAG 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACATCCATGTACAAGTATCCCTCTGATATCTCTACATGCCTTCCTACCATGCCCATGAA 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cheahdericarcritereceerereacearecreeardeerereacerecreeacerre 1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGG 1373
                                                                                                                                                     AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGAAGACGCTGAT 1013
                                                                                                                                                                                               945
CAGCGCCCCAGCACATCCTATCACATCCTGGGGCCAACCAGCAGCCGCCTAGCAAC
                                                                                                                                                                                                                                         GAAGTGGCTTGGCGAGAGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTC
                                                                                                                                                                                                                                                                                                                               AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTGGAGCAGCATCACAATACTGGACCTCCCCCACTGCTGGGGATCTATCCAAACCCCCAGT
                                                                                                    CCTGGGAGTGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAACTACTGTGTCGACAGCGCC
                                                                                                                                                                                            AACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAATGACGGACCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCCAGCTGCTCATA-----TGCCTTCCCATCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               srccccccarccraccccacerectricacacriaedecacracracra 1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; cytostatic; gene therapy; vaccine; carcinoma; lymphomas; neoplasm; adenocarcinoma; Barcoma; gene.
                                                              CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-00798586.
2001US-00004113.
2001US-00052482.
2001US-00997722.
2001US-00034650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-DEC-2001; 2001WO-US051291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Engelhard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003-239337/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB72427 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003008583-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse Flil cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SAGR-) SAGRES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAR-2001; 2
23-OCT-2001; 2
08-NOV-2001; 2
30-NOV-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ž.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                   1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1314
                                                                                                                                                                                                                                                                                                                               1074
                                                                                                                                                                                                                                                                                                                                                                         1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1306
                                                              894
                                                                                                                                                     954
                                                                                                                                                                                               886
                                                                                                                                                                                                                                         1014
                                                                                                                                                                                                                                                                                     946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB72427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             House;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11

DB7427

TD ADB72427

XX ADB72

XX ADB72

XX M MOUSE

XX MUS & XX

XX M MOUSE

XX MUS & XX

YX MUS & XX

XX MUS & X
                                                                                                 g
                                                              ò
                                                                                                                                                ò
                                                                                                                                                                                     g
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
```

us-09-902-772-1.rng

```
----Treacresceraraacaeaacerecearaeaaceaeareeaeaeaaceaeareaeaar 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 66.8
es 917; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
      %$666666666666666666666666666666668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                            1133
                                                                                                                                                                                                                                                                                                                                    1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1305
                                                                                                                           1013
                                                                                                                                                                                                                                                    1005
                                                                                                                                                                                                                                                                                                                                                                             1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACATCCATGTACAAGTATCCCTCTGATATCTCCTACATGCCTTCCTACCATGCCCATGAA 1185
                                                                                                                                                                                                                                                                                                                                                                                                                   TATGCCTACAAGTTTGACTTCCATGGCATTGCCCAGGCCCTGCAGCCACATCCAACAGAG 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGG 1373
                                                                                                                                                                   945
                                                                                                                                                                                                          GAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTC 1073
                                                                                   885
                                            953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse; murine; carcinoma associated; oncogene; carcinoma; cancer; breast
prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cadaladeridalerringrecegnereleceanderecendeererereceneereereeree
    CAGCGCCCCAGCCAGATCCTTATCAGATCCTGGGGCCAACCAGCAGCAGCCTAGCAAC
                                                                                                                                                 AACGCCAGCTGTATCACCTGGGGGGGGCCCAACGGGGGGTTCAAAATGACGGACCCTGAT
                                                                                                                                                                                                                                     GAGGTGGCCAGGCGCTGGGGGAGAGAGCGAAAGCCCAAACATGAATTATGACAAGCTG
                                                                                                                                                                                                                                                                                                                                    AGCCGGCCCTCCGATACTACTATGACAAAACATTATGACCAAAGTGCATGGCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT
                                                                        CTGGGAATGGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAACTACTGTCCGACAGGCCC
                                                                                                                           AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                            AGCCGTGCACTTCGCTACTATATGACAAAATATTATGACTAAAGTTCATGGTAAACGC
                                                                                                                                                                                                                                                                                                                                                                           TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGGAGCAGCATCACAATACTGGACCTCCCCCACTGCTGGGATCTATCCAAACCCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CIGCCAGCTGCTCATA ---- TGCCTTCCCATCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inant nucleic acid encoding carcinoma associated protein, preparing compositions for treating carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1306 Grececcoreceraceracecaceracéricacacriadecaceraciacia 1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   carcinoma associated cDNA, SEQ ID NO:1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 1206; 245pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA02688 standard; cDNA; 1729 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-DEC-2002; 2002WO-US041414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-DEC-2001; 2001US-00035832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-587068/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003057146-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse Flil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Morris DW,
                                                                                                                                                                                                          1014
                                                                                                                                                                                                                                                                                          1074
                                                                                                                                                                                                                                                                                                                                    1006
                                                                                                                                                                                                                                                                                                                                                                                                                   1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1374
                                                                                 826
                                                                                                                                                                                                                                                                                                                                                                         1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1186
                                         894
                                                                                                                           954
                                                                                                                                                                886
                                                                                                                                                                                                                                                  946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
ADA02688
ID ADA02688
ID ADA02
XX ADA02
DE MOUSE
XX MOUSE
XX GENE;
XX GENE;
XX GENE;
XX GENE;
XX GENE;
XX GENE;
XX MUS E
XX GENE;
XX MUS E
XX GENE;
XX MUS E
XX MUS E
XX GENE;
XX MUS E
셤
                                                                        ద
                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               장 원
                                       ò
                                                                                                                  ò
                                                                                                                                                     Q
                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

```
The invention relates to recombinant carcinoma associated (CA) nucleic acid sequences from mouse and human (ADA01482-ADA03094), and to recombinant carcinoma associated proteins (CAP) encoded by them. The invention also encompasses expression vectors and host calls comprising a convention also encompasses brocking comprising CA nucleic acid, a polypeptide (especially an antibody) that specifically convention were identified using the protein. The sequences of the invention were identified using concogenic retroviruses, which insert into the genome of the host organism of transported. The sequences of the invention were identified using concogenic retroviruses, which insert into the genome of the host organism of transported way of these do not carry transduced host norogenes or pathogenic trans-acting viral genes, meaning that cancer incidence is a direct consequence of the effects of proviral integration into host concompass. The CA nucleic acid sequences can be used to diagnose carcinoma (especially breast cancer, prostate cancer, lymphoma or expression or a propensity to carcinoma by determination of the sequence carcinoma (especially breast cancer, prostate cancer, lymphoma or tissues. CA nucleic acids, proteins and antibodies are also useful as thereminate of the invention. Note: The complete sequence data for this sequence of the printion of the printed specification, but was obtained confine int/pub/published_pot_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  417 ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245 Argeacegeacrárraageagercrercrercreségeagreacearcaercerrrrear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            425 cc-----adroadagrcaargrcaadcosoagrargaccacargaarddarcadd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123 TGTGCCTACGGATCG---CCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180 GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCGAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  656 efriceacaetecerecaetececraraaaeceariaceearreaacaerreace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597 CTCACGCCGAGCTATAACGCAGATATCCTCTGTCACACCTACACTACCTCAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 657 GGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596 Accaccaacgaacgagagagacatricidecerecagaccecacacagagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305 reaccaráccaccaccercirceccaaccacacercircece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240 CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          476 gagricriciogracidadergracidadangrandracidacidorgocogagocogaagoco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360 GTTGGGATGAACTATGGAAGCTACATGGAAGAAGGA---TATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           536 AACCCCATGAACTATAATAGCTACATGGATGAAGAAGAACGGCCCCCCCTCCTCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTACGGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         716 TTCTTCCAGAACATGGATGGCAAGGAATTGTGTAAAATGAACAAGGAGGACTTCCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          776 gccaccricogccriaciacacacada argerterroricocaccrica granderado de academento de aca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 8; Length 1729;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1729 BP; 466 A; 484 C; 436 G; 343 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 570.2; DB 8;
Pred. No. 2.8e-176;
0; Mismatches 423;
```

```
180
                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     417
                                                       Morris
                                                                                                                                                                                                                                         Query Mate
Best Loca
Matches
심
                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                8
                                                                                                                                                               1013
                                                                                                                                                                                 1189
                                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                           1129
                                                              GAAGTGGCTTCGGCGTTGGGGAGAGGAAAACCTAACATGAACTATGACAAACTC 1073
                                                                                                                                                                                                                      GAGGTGGCCAGGCGCTGGGGAGAGCGGAAGAGCAAGACCCAACATGAATTATGACAAGCTG 1249
                                                                                                                                                                                                                                          AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC 1133
                                                                                                                                                                                                                                                             AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAGTGCATGGCAAAAGG 1309
                                                                                                                                                                                                                                                                                                   rardectracaagrirgacrirccardecerreceadeceerecadecadaccaacada 1369
                                                                                                                                                                                                                                                                                                                       TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                                                                                                                                                                                                                                                                    ACATCCATGTACAAGTATCCCTCTGATATCTCCTACATGCCTTCCTACCATGCCCATCAA 1429
                                                                                                                                                                                                                                                                                                                                                             CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT 1313
                                                                                                     CAGCGGCCCCAGCCAGATCCTTATCAGATCCTGGGGCCAACCAGCAGCGCCGTAGCAAAC 1069
                                                                                                                                                                                                                                                                                                                                                                                1489
                                                                                   893
                                                                                                                         953
                         GTCAAGGAACCCTTCTTATGACTCTGTCAGGAGGAGGAGCATGGAACAATATGAAC
                                                                                                                                           cereagaacracaacarcaacraracaacrarrereeraaacracrareeaacaacaaca
                                                                                                                                                                                                                                                                                                                                                                                CAGAAGGTGAACTTTGTCCCGTCTCACCCATCCTCCATGCCTGTCACCTCCTCCAGCTTC
                                             CATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGAC
                                                                                   AACTCCAACTGCATCACCTGGGAGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                 AACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCTGAT
                                                                                                                                                                                                                                                                                 TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                  TTTGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                    rrregageagearcaeaaraeregaeereeeeeeeregaarerareeaaaeeeeeer
        ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACA---GC
                                                                                                                         CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCCAGCTGCTCATA-----TGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99; cytostatic; gene therapy; vaccine; carcinoma; lymphomas;
neoplasm; adenocarcinoma; sarcoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      grececcarectareceaecteceretracaetrasses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB72426 standard; mRNA; 1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-MAR-2001; 2001US-00798586.
23-OCT-2001; 2001US-00004113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US051291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse Flil mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003008583-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2003
                                                                                                    1010
                                                                                                                                           1070
                                                                                                                                                                                  1130
                                                                                                                                                                                                                        1190
                                                                                                                                                                                                                                                                                                                                                             1254
                                                                                                                                                                                                                                                                                                                                                                                                                                         1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1550
                         890
                                           774
                                                                950
                                                                                   834
                                                                                                                         894
                                                                                                                                                               954
                                                                                                                                                                                                    1014
                                                                                                                                                                                                                                          1074
                                                                                                                                                                                                                                                             1250
                                                                                                                                                                                                                                                                                1134
                                                                                                                                                                                                                                                                                                   1310
                                                                                                                                                                                                                                                                                                                                         1370
                                                                                                                                                                                                                                                                                                                                                                                1430
                                                                                                                                                                                                                                                                                                                                                                                                                     1490
                                                                                                                                                                                                                                                                                                                       1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADB72426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mouse;
                                                                                                                  & g
                                                                                                                                                        ò
                                                                                                                                                                           8 &
                                                                                                                                                                                                                  8 A
                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                      g
                                     ò
                                                          8 & 8
                                                                                                                                                                                                                                                                          \dot{\delta}
                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
```

```
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel recombinant nucleic acid comprising a nucleotide sequence salected from any of the 600 sequences fully defined in the specification. A polymucleotide of the invention has cytostatic activity, and may have a use in gene therapy, or in a vaccine. The recombinant nucleat acids and polympetides are useful for treating carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and sarcomas. The present sequence represents a mouse mRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carcinomas, lymphomas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GITCGACAGIGGCIGGAGIGGCIATAAAGGAAIACGGAITGAIGGAGAITGACTICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----rrcacrecrescraraacacaccerreceareacacacrecrescress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTACGCCAGTGGCTGGAGTGGGCAGTGAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arcaacacaacirarraacaacacrergrergregaacaacaarcaarcaartraar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123 TGTGCCTACGGATCG---CCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    365 gacracedecacedes da anticado en contrato de contratos de contratos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 476 gagricricogracadoricos de grandes de como de contra 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGCCACTITITATITICCAAATACATCAGTITACCCAGAAGCAACGCAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             305 TCAGCATACGGAGCGGCAGCCCATCTCCCCAAGGCAGATATGACTGCTTCGGGGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425 CC-----AGTGAGAGTCAATGTCAAGGGGGAGTATGACCACATGAATGGATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360 GTTGGGATGAACTATGGAAGCTACATGGAAGAAGCA---TATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sos accaccaaccaaccacacarcarrerecerecacaccececererereseace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGTTCCAGAACATTGAGAAAGAGTTGTGTAAAATGACCAAAAATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  716 Trcrrccagaacaregaregcaaggaarrereraaaraaacaaggagaacrrccaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 776 gecacercesecracacacacacacacacacacacacacacacacaracaracacacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1729,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1729 BP; 466 A; 484 C; 436 G; 343 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 570.2; DB 9;
Pred. No. 2.8e-176;
0; Mismatches 423;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New recombinant nucleic acid, useful for treati
cancers, neoplasm, adenocarcinoma, or sarcomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 254; 2304pp; English
08-NOV-2001; 2001US-00052482.
30-NOV-2001; 2001US-00997722.
20-DEC-2001; 2001US-00034650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 39.4%;
Local Similarity 66.8%;
es 917; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĘĶ
                                                                                                                                                                                                                                                                                                                      (SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Engelhard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-239337/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ,
M
```

ä

Plougastel

Σ Peter

Ţ, Melot

g

8 8

q ò g ò g

6 B 6

```
New nucleic acid of EMS gene and its hybrid(s) - contg. gene sequence involved in chromosomal trans-location, also derived mRNA, probes, fusion proteins etc., for diagnosis and treatment of Ewing sarcoma and melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The probe 11RR1 was used to screen a human marrow cDNA library (Clontech car.# Hilloss). The clone BMO25 was identified and sequenced. It represents the entire coding region together with 5'- and 3' UTRS of the Hum-Fli-1 gene. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2938 BP; 847 A; 692 C; 675 G; 724 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     Desmaze С,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 7; 123pp; French
                                                                                                                                                                                                       (CNRS ) CNRS CENT NAT RECH SCI
                                                                                                                 93WO-FR000494.
                                                                                                                                                             92FR-00006123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 66.5%;
Matches 913; Conservative
                                                                                                                                                                                                                                                   Delattre O,
Zucman J;
                                                                                                                                                                                                                                                                                                                        WPI; 1993-386580/48.
                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAR44556.
                                                                                                                 19-MAY-1993;
                                                                                                                                                             20-MAY-1992;
                      WO9323549-A2
                                                                  25-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 323 CC
                                                                                                                                                                                                                                                     ďΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            477
                                                                                                                                                                                                                                                        Aurias
                                                                                                                                                                                                                                                                                rhomas
Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                   1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1549
                                                                                                                                       1009
                                                                                                                                                                                                                                                                                                                                                                         1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1193
                                                                                                                                                                                                                                  1069
                                                                                                                                                                                                                                                                                                                          1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Agcogogocorocoaracrarcarcaaaaacarrargaccaaagrocaragogaaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              raridoctracaagriridacrirocardecarridocdagecorecaedacadrocaacada 1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATCCATGTACAAATACCCATCAGACCTCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1370 acarccargracaagrancccrcrcaararcrccracargccrrccraccargcccarcaa 1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTT 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGG 1373
                                                                                                                                                                                   893
                                                                                                                                                                                                                                                                              953
773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene;
                                                                                                                                                                                                                   cadaaddridactionication contraction candidates and contraction contractions and contractions and contractions and contractions and contractions are contracted as a contraction of the co
                                            GTCAAGGAAGACCCTTCTTATGACTCTGTCAGGAGGAGGAGCATGGAACAATAATATGAAC
                                                                                                                                       CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACACAGCTCC
                                                                                                                                                                                                                                                                                                      CCTGGGAGTGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAACTACTGTCCGACAGCGCC
                                                                                                                                                                                                                                                                                                                                                                         AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAAACTATGAAAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Triggagdagcarcacaaracacacciccccccccidercagarcratocaaaccccagar
                                                                                        ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACA---GC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CIGCCAGCIGCICATA-----TGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        greececearecraacacecacerecriteacacritadecacriacriacria 1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chromosomal translocation; chimeric; chimaeric; Ewing sarcoma; Ews malignant melanoma; hum-fil-1; primitive peripheral neuroectodermal tumour; human chromosome 11; human chromosome 22; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Hum-Fli-1 gene clone BM025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; cDNA; 2938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
26-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                       1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1374
                                                                                                                                                                                                                                                                                                                          1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ50644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ50644
                                              890
                                                                                                                                       950
                                                                                                                                                                                                                                                                           894
                                                                                                                                                                                                                                                                                                                                                                         954
                                                                                                                                                                                     834
```

g

ò g à g

g ò

 δ

С

ò g ð 2, Length 2938;

```
9
                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                          416
                                                                                                                                                                                                                                                                                                                                                                                                                                       476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      732
                                                            122
                                                                                                                        179
                                                                                                                                                     262
                                                                                                                                                                                     239
                                                                                                                                                                                                                  322
                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                          202
                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                    300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                         374 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTACGGCAGTGGCAGTGGAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                               ------AGTGAGGGTCAACGTCAAGCGGAAGTATGACCACATGAATGGATCCAGG
                                                                                                                                                                                                                                                                                                                                                                          360 GITGGGATGAACTATGGAAGCTACATGGAAGAGGAGCAT---ATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                      CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Graadgearredagredecerraaagaagrafagerreargaagaredacaree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGITCCAGAACATTGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA
                                                                                       143 Ardacogoaciatraadaagcicicicicocogoadaacoaccaccacciciridae
                                                                                                                        123 TGTGCCTACGGATCG --- CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGT
                                                                                                                                                  203 TCAGCGTACGGAGCGCCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT
                                                                                                                                                                                      GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT
                               Gaps
                               33;
Score 563.8; DB 2; Length 29
Pred. No. 5e-174;
0; Mismatches 427; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
```

"HUM-FLI-1"

/*tag= a /product= "Hi 2908. .2913 /*tag= b

polyA_signal

Location/Qualifiers 143. 1501 /*tag= a

sapiens

Ношо Key

à 유 ઇ d 8 G

```
26-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
%#X#X#X#X#X#X###XMXDQQQQQQX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                  1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAAGGIGAACTTTGTCCCTCCCCATCCATCCTCATGCTGTCACTTCCTCCAGCTTC 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGGAGCCGCATCACAATACTGGACCTCCCCCAGGGGGAATCTACCCCAAC 1447
                                                                                                                                                                                                                                                                                                                                                       AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGCAAAAGA 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1314 TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA- 1371
                                                                                                                                                                                                                                           CCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGACAGCGCC 1027
                                                                                                                                                                                                                                                                                               1028 AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT 1087
                                                                                                                                                                                                                                                                                                                                       GAAGTGGCTTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTC 1073
                                                                                                                                                                                                                                                                                                                                                                                            AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCACGAA 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                           847
                                                                                                                    833
                                                                                                                                                                      716
                                                                                                                                         848 TCTGGCCTCAACAAAAGTCCTCCCCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAG 907
                                                                                                                                                                                                                                                                                  AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
           GGAGCCACTTTTTTTTTCCAAATACATCAGTTTACCCAGAAGCAAGGAATAACA
                                                                                        Grcaaagaagacccrrcrrangacrcagrcagaagaggaggargggggggaaraagagaar
                                                                                                                    CC---CACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAC
                                                                                                                                                                                                                              ccaegeagreeccaearacaecrargecaerrecracreegaecrrererecaecree
                                    ----trcacrecrescentarahahacaacereceacaceacearecreacearreace
                                                               717 ACAAGGCCAGATTTACCTTATGAGCAAGCAGGAGATCAGCGTGGACGAGTCACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1448 GTCCCCGCCATCCTAACACCCACCTGCCTTAGGCAGCTACTACTA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----GGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1388
                                                                                                                                                                                                                                                                                                                                         1014
                                                                                                                                                                                                                                                                                                                                                                                            1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1372
           657
                                                                                           788
                                                                                                                                                                         834
                                                                                                                                                                                                  908
                                                                                                                                                                                                                              894
                                                                                                                                                                                                                                                        968
                                                                                                                                                                                                                                                                                   954
                                                                                                                                                                                                                                                                                                                                                                  1088
                                                                                                                                                                                                                                                                                                                                                                                                                       1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1194
                                                                                                                    777
```

유 장 유

8 8

ò g $\overset{\circ}{\circ}$ 쉽

8 6 8

 $\dot{\delta}$

Human FLI1 carcinoma associated coding sequence, SEQ ID NO:1210 ADA02692 standard; cDNA; 1359 (first entry) 06-NOV-2003 ADA02692 0X8X5X5X5X5X6X6X6X6X6

Human, carcinoma associated, oncogene, carcinoma, cancer, breast, prostate, lymphoma, leukaemia, cytostatic, gene therapy, drug screening, gene, ss.

WO2003057146-A2 17-JUL-2003

sapiens

Ношо

26-DEC-2002; 2002WO-US041414

2001US-00035832

(SAGR-) SAGRES DISCOVERY

Morris DW

WPI; 2003-587068/55

carcinoma associated protein, treating carcinomas. New recombinant nucleic acid encoding useful for preparing compositions for

Claim 1; SEQ ID NO 1210; 245pp; English.

The invention relates to recombinant carcinoma associated (CA) nucleic acid sequences from mouse and human (ADA01482-ADA03094), and to consider sequences from mouse and human (ADA01482-ADA03094), and to companie associated proteins (CAP) encoded by them. The recombinant carcinoma associated proteins (CAP) encoded by them. The mountion also encompasses expression vectors and host cells comprising a can mucleic acid, a polypoptide (especially an antibody) that specifically binds to the protein, and a biochip comprising CA nucleic acid or fragments thereof. The sequences of the invention were identified using oncogenic retroviruses, which insert into the genome of the host organism at random. Many of these do not carry transduced host oncogenes or pathogenic trans-acting viral genes, meaning that cancer incidence is a direct consequence of the effects of proviral integration into host carcinoma (especially breast cancer, prostate cancer, lymphoma or carcinoma (especially breast cancer, prostate cancer, lymphoma or carcinoma of expension of the sequence of a CA gene, or by determination of CA gene expression in particular transpeutic agents and in screening and evaluating drug candidates. The present sequence represents a specifically claimed human CA nucleic acid companied sequence of the invention. Note: The complete sequence data for this capent did not form part of the printed sequence at a for this capent did not form part of the printed sequence.

C ftp.wipo.int/pub/published_pct_sequences.

Sequence 1359 BP; 359 A; 422 C; 333 G; 245 T; 0 U; 0 Other;

33; Length 1359; Indels Query Match
38.9%; Score 562.2; DB 8;
Best Local Similarity 66.4%; Pred. No. 1e-173;
Matches 912; Conservative 0; Mismatches 428;

> 셤 ò g

8

291 416 351 akarictocaradachickackaracaaaracakacakacidaragoodaaacakarco GTTGGGATGAACTATGGAAGCTACATGGAAGAGAAGCAT---ATTCCGCCTCCAAATATG AACCCCATGAACTACAACAACTATATGGACGAGAAGAATGGCCCCCCTCCTCCCAACATG 232 360 g ò g ò

292

a

8

177 GTACGGCAGTGGCT 1	GTACGGCAGTGGACTGGAGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG 536	TIGITICCAGAACATIGATGGGAAAGAGTTGTGTAAAATGACGAAAGATGACTTCCAGAGA 596 	CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACCTCAGAGAGAG	CACTITIAITITICCAAAIACAICAGITIACCCAGAAGCAAGGCAAAGAAIAACA 716 	aaggccagatttaccttatgagcaaggaggatcagcgtggaggacaggcacag 776 	CCACTCAGTCAAAAGCTACCCAACCATCATCAACAGTGCCCAAAACAGAAGAC 833 	CAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAGCCAG	CCAGGGAGTGGGCAGATACAGCTATCTACTGGAGCTTCTGTCGACAGCTCC 953	AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT 1013 	GGCTCGGCGTTGGGGAGAGAAAGCAAACCTAACATGAACTATGACAAACTC 1073 	agccgtgcacttcgctactactatgacaaaatattatgactaaagttcatggtaaacgc 1133 	CCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCACAA 1193 	CATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCC 1253	CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT 1313 	7	ACAATACTGGACCTCCCCCACGGGGGAATCTACCCCAACCCCAAC 1305	4 7	TARCACCACGIGCUITCACACIIAGGCAGGIACIACIA 1358
	r 0	C 01	32	57 GGAGC 91	17 AC 46 GT	O H	4 0	4 0	4t 70	4 GAAGT GAGGT	44 70	134 TATG 066 TATG	194 T	254	314	246	372	306

Search completed: May 27, 2004, 16:39:39 Job time : 687 secs

Н

```
1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-878-177-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGIH:
 0000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Appl
Appl
                                                                             May 27, 2004, 16:28:07 ; Search time 143 Seconds (without alignments) 5615.482 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 gaattoogogaacgaataat........gaaagaaagogocaagaaaa 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                         Issued_Patents NA:*
1: /ogn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS COMB.seq:*
6: /cgn2_6/ptodata/2/ina/PCTUS COMB.seq:*
5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                 682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
GenCore version
Copyright (c) 1993 - 2004
                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                      sw model
                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                      using
                                                                                                                                                                                                                                                                                          length: 0
length: 2000000000
                                                                                                                                    US-09-902-772-1
1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1447
1356
1336
1308
180
1248
1248
122.2
1122.2
1122.2
1122.2
1122.2
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
1100.6
100.6
100.6
1000.6
1000.6
1000.6
1000.6
1000.6
1000.6
1000.6
                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                          Minimum DB seq
Maximum DB seq
                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Result
No.
```

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATATGGGCAAACATCAAAGATGAGCCCGCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCCGCCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGGGAIGAACTAIGGAAGCIACAIGGAAGAAGCAIATICCGCCICCAAATAIGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGGATGAACTATGGAAGGAAGAGAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGTGCCTACGGATCGCCCCACCTTGCAAAGACAGAATGACAGCCTCCTCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-878-177-1

Sequence 1, Application US/08878177

Sequence 1, Application US/08878177

Sequence 1, Application US/08878177

Secuence 1, Application US/08878177

TYPLE OF INVENTION:

TITLE OF INVENTION: Cell Calcification Suppressing Proteins and Genes of TITLE OF INVENTION: The Proteins

TITLE OF INVENTION: The Proteins

TITLE REPERSENCE: chaqai seiyaku kabushiki kaisha 5001

CURRENT APPLICATION NUMBER: US/08/878,177

CURRENT FILING DATE: 1997-06-18

NUMBER OF SEQ ID NOS: 7

SEQ ID NO 1

SEQ ID NO 1
                                                                                                                                                                                                            4004460
                                                                                                                                    44,
                                                                                                                                                                                              44
                                                                         Sequence Seq
                    Sequence
                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1447;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c-erg gene w/ deletion, chicken DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3;
US-09-920-759-13
US-09-784-316-3
US-09-784-316-3
US-09-030-607-44
US-09-352-6167-44
US-09-232-1457-44
US-09-232-1457-44
US-09-685-1667-44
US-09-685-1667-44
US-09-009-913-2
US-09-009-913-2
US-09-009-913-2
US-09-009-913-2
US-09-009-913-4
US-08-368-281-1
US-08-368-281-1
US-08-368-281-1
US-08-368-281-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 1447;
100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 1447; Conservative
    TYPE: DNA
ORGANISM: C-11 gene,
```

οĘ

ઠે 유 ें g ò Dp ò a · 장 협 8 6 8

8 8 ò

8 8 8

원 장 임

8 6 8 6 8 6

6 6 6 6 6 6

```
---GAGGAGCCACTTTTTTTTTCCAAATACATCAGTTTACCCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATATGGGCAAACATCAAAGATGAGCCGGCGCTTCCCCAGCAGGACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATTCCGCGAACGAATAATTATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                    241 CCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTCACCTGATGACTGCAGCGTGGCAAAAAGGAAGGAAAATGGTTAGCTTCAGACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCACATTTGACTTCAGATGATGTTGATAAGGCCTTACAAAACTCTCCACGGTTAATGC
                                                                                                                                                                                                                                                                                                                                                 1 GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                             AGTGTGCCTACGGCCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANTATIGGGCAAACATCAAAGATGAGCCCGGCGCTTCCCCCAGCAGCACTGGTTATCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCGGCCCAGAGTTACCATTAAGATGGAGTGTAACCCAAAACCAGGTTAATGGGTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCAGTGGCTGGAGTGGAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                    81;
                     Sequence 3, Application US/08878177;
Patent No. 6294354;
GENERAL INFORMATION:
TITLE OF INVENTION:
CURRENT APPLICATION WHEE:
UNDERNY APPLICATION UNDER:
UNDERNY APPLICATION WHEE:
UNDERNY APPLICATION WHEE:
CURRENT FILING DATE: 1997-06-18
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.0
SEQ ID NOS: 7
                                                                                       and
                                                                                                                                                                                                                                                                                        Length 1528;
                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                       DB 3;
                                                                                                                                                                                                                                                                                     Score 1356; DE Pred. No. 0; O. Mismatches
                                                                                                                                                                                                                                           chicken DNA
                                                                                                                                                                                                                                                                                       93.78;
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 94.7
Matches 1447; Conservative
                                                                                                                                                                                                            LENGTH: 1528

TYPE: DNA

CRGANISM: c-erg gene,

US-08-878-177-3
RESULT 2
US-08-878-177-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCCAATACCAGGCTGCCAG 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAPATITICATITICCACGGAATCGCTCAGGCCTCCAGCCTCCAGAATCATCCA 1200
                                                                                       540
                                                                                                                                                                                  099
                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
 480
                                                            540
                                                                                                                      600
                                                                                                                                                   600
                                                                                                                                                                                                               9
                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                    780
                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGACGAGCTAGCCTCCCA
                                                                                                                                                                                                                                                                                                                                                                CTCAGTCAAAAGCTACCCAACCATCATCTACAACAGTGCCCAAAAACAGAAGACCAGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCGGCGTTTGGGGAGAGGAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTTCGCTACTACTATGACAAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACABATTTGATTTCCACGCATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCCATCTTGGCACCTACTAAGTGGGGAAAGAAAGAAAGCCC
                                                                                       Gecagrederegageagregageagregagearargererrecagageagarerrerrer
                                                                                                                      TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                          TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCA
                                                                                                                                                                                  ccacititatititiccaaatacatcacittacccagaagcaacgcaagaataacaacaa
                                                                                                                                                                                                                                                                                                         GGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTTCCAACTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTECATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Acrocarcacargegaegeacacaaaregegaetrcaagareacagaecergargaagaege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCCCCAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTAC
                           CCAATGAACGAAGAGTTATTGTGCCAGGATCCTACGTTATGGAGCACAGACCATGTAC
                                                                                                                                                                                                               CCACTITIATITICCAAATACATCAGTITACCCAGAAGCAACGCAAAGAATAACAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                              CTCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCGGCGTTGGGGAGAGGAAAAGCAAAACCTAACATGAACTATGACAAACTCAGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTICGCIACIACIAIGACAAAATAITAIGACIAAAGIICAIGGIAAACGCIAIGCCI
                                                            GGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCTCATATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                              421
                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196
 421
                                                                                         481
                                                                                                                        541
                                                                                                                                                     541
                                                                                                                                                                                  601
                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                            481
```

1;

180

180 240 240 300 300 360 360 420 420

120 120

9 9

540

540 600 009 99

654

654

669

a

ò

g

ò

g δ d

ò

g ò Dp Dp

ò

쉱 à g à g δ a ò g ò g ð g

ò

```
179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134 AACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCACAACATG 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            143 ATGGACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACGACCAGTCCCTCTTTGAC 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAAT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374 cherchedergeachedeachedeannachantechedeachedergedegegegegagetec 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cc------adrica e e de carca de ce e cara de cara de la caraca del caraca de la caraca del la caraca de la caraca del la caraca de la ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 ATGGCAACCACTATTAAGGAAGCATTATCAGTGGTGAAGAAGACCAGTCCTTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGCCTACGGATCG----CCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATATIGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTGGGATGAACTATGGAAGCTACATGGAAGAAGCAT---ATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 2938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39.0%; Score 563.8; DB 2; 66.5%; Pred. No. 1.2e-183; tive 0; Mismatches 427;
                                                                                                                                                                                                                                                                                                                                                                                                                               MEDUTO TRANSPORTED FORMY
COMPUTER: PLOPPY disk
COMPUTER: ISM PC Compatible
COMPUTER: ABDIT 1.0 DOS LEXT Editor
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/343,443B
FILING DATE: 18-NOV-1994
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/FR93/00494
FILING DATE: 19-MAY-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR93/00494
FILING DATE: 19-MAY-1993
ATPLING DATE: 20-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: Weiser, Gerard J.
REJERRANCE/DOCKET NUMBER: 19,763
REFERENCE/DOCKET NUMBER: 19,763
TITLE OF INVENTION: TRANSLOCATIONS
NUMBER OF SEQUENCES: 129
CORRESPONDENCE ADDRESS:
ADDRESSEE: Welser & Associates
STREET: 230 South Fifteenth Street
CITY: Philadelphia
STATE: PA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-875-8394
TELEPAX: 215-875-8394
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGIH: 2938 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 66.5
Matches 913; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                                                                                                                                                                                                                                               ZIP: 19102
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy (
COMPUTER: IBM PC comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
143..1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nuclei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-343-443B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 %
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Debmare, Thomas
Peter, Martine
Ploougastel, Beatrice
Thomas, Gilles
Thomas, Gilles
AUGUANTION: NUCLEIC ACID CORRESPONDING TO A GENE OF
VENTION: CHROMOSOME 22 INVOLVED IN RECURRENT CHROMOSOMAL
VENTION: TRANSLATIONS ASSOCIATED WITH THE DEVELOPMENT OF CANCEROUS
VENTION: TUMORS, AND NUCLEIC ACIDS OF FUSION RESULTING FROM SAID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441 ACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCCATCTTGGCACCTACTACTAAG 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081 reacadaccereardaagreeerceecerreeegaagagagagagaaagcaaaccraacarda 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAG 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGC 1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trearggramacgerargeeracamartreartreacgemarcgereaggeereerage 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261 crcaccerceagaarcarceargracaaaraccearcagacereceracargagreer 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGGTAA 1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1300 CCTCATCCAGCTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCT 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1360 ACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAAG 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021 reroccacrecaacrecaacrecarescreceres de de consecue de consecu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 879
                                                                                                                                           759
                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                   819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTC 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCGGACAGCTCCAACTCCATCTACCTGGGAGGGCACAAATGGGGAGGTTCAAGA 999
    ATGCTAGAAACACAGGAGGCAGCCACTTTTATTTTTCCAAATACATCAGTTACCCAGAAG 780
                                                                                                                                                                                                                                                                                                                                                                                                   841 GGACGAGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACGCAAAGAATAACAACGAGCCCAGATTTACCTTATGAGCAAGCGAGGAGGAGCGT
                                                                                                                                                                                                                           781 CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGTCAGCGT
                                                                                                                                                                                                                                                                                                                   GGACGAGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1420 TGGGGAAAGAAAGAAAGCGCCAAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501 TGGGGAAAGAAGAAGCGCCAAGAAA 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/08343443B
Sequence 3, Application US/08343443B
Patent No. 5968734
GENERAL INOFMATION:
APPLICANT: Aurias, Alain
APPLICANT: Delattre, Olivier
APPLICANT: Desmaze, Chantal
APPLICANT: Delattre, Martine
APPLICANT: Peter, Martine
APPLICANT: Peter, Martine
APPLICANT: Thomas, Gilles
APPLICANT: Thomas, Gilles
APPLICANT: Thomas, Gilles
APPLICANT: Caucman, UNCLBIC ACID CC
TITLE OF INVENTION: CHROMOSOME 22 1
TITLE OF INVENTION: THOMS. 22 1
TITLE OF INVENTION: THOMS. 22 1
TITLE OF INVENTION: THOMS, AND NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-08-343-443B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1240
                                                                                                                                       700
                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    940
```

ö

```
999 ATGACAGACCCTGATGAAGTGGCTTCGGCGTTGGGGAGAGGAAAAGCAAAACCTAACATG 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1059 AACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAA 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1119 GITCATGGTAAACGCTATGCCTACAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAG 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769 ĠTGCACGGCAAGCGCTACGCCTTTGACTTCCAGGGCCTGGCACAGGCTTGCCAG 828
    TITLE OF INVENTION: Reagents and Methods for the Screening of Compounds TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases CURRENT APPLICATION WUMBER: US/09/360,779

CURRENT FILING DATE: 1999-07-26

BARLIER APPLICATION NUMBER: 60/094,264

BARLIER APPLICATION NUMBER: 60/094,264

BARLIER PILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 13

SEQ ID NO 1

LENGTH: 1752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649 creacedadecedadadardadadadadaceradadecedadadadadadanard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          939 CTGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sso checcadacededaladecededaladalada en checadedededededededededalada
                                                                                                                                                                                                                                                                                                                                                                                                                                             879 AGCCGTCTTGCAAATCCAGGGAGTGGGCAGTACAGCTATGGCAGTTCCTACTGGAGCTT
Hendricks, Timothy J.
                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 74.0%;
Matches 228; Conservative
                                                                                                                                                                                                                              TYPE: DNA

GRGANISM: Rattus norvegicus

FRATURE:

NABAYKEY: CDS

LOCATION: (112)..(1131)

US-09-360-779-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1179 CCTCACCC 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGTGGCCAGGCGCTGGGCGAGCGGAAAAGCAAGCCCAACATGAATTACGACAAGCTG 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGGCAAAAGA 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1268 TCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGCCCACCAGG 1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1254 CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1388 ririggaecicecarcacaaracredaaccrececeaceseseaarcracecaacecaace 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1028 AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1074 AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAAGTTCATGGTAAACGC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATGCCTACAAATTTGATTTCCAÇGGAATCGCTCAGGGCCCTCCAGCCTCACCCTCCAGAA 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1328 chdahderidahcriridrecereeeareeareereeardeerdrekerreereeaderire 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1314 TITGCIGCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA- 1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGTGGCTCGGCGTTGGGGAGAGGAAAGCAAACCTAACATGAACTATGACAAACTC 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCAATGGCTGGAGGCCATAAAGGAGTATAGCTTGATGGAGATCGACATCC 613
                                                                                                                                                                                                                                                     657 GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAGAATAACA 716
                                                                                                                                                                                                                                                                                                                                                                      GTCAAAGAGGCCTTCTTATGACTCAGTCAGAGGAGGAGCATGGGCAATAACATGAAT 847
                                                                                                                                                                                                                                                                                                                                                                                                              CC---CACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                 848 reregeercakcaakaereereereekeekeegeekaakeearekerkakakaraakkaka 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC 953
                    GTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG 536
                                                                                                                                   614 TTTTTCCAGAACATGGATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCCGC 673
                                                                                                                                                                                                                                                                                        597 CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA
                                                                                                                                                                                                               674 GCCACCACCTCTACAACACGGAAGTGCTGTTGTCACACTCAGTTACCTCAGGAAAG-
                                                                                                                                                                                                                                                                                                                                717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----GGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1448 GICCCCCCCCAICCIAACACCCACGIGCCTICACACTIAGGGAGCIACTACIA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1194
                                                        554
                                                                                              537
                                                                                                                                                                                                                                                                                                                                                                          788
                                                                                                                                                                                                                                                                                                                                                                                                                777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      954
                                                                                                                             8 6 8
                                                                                                                                                                                                                                                                              음 상
                                                                                                                                                                                                                                                                                                                                                               원 수 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임 상 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ व ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                쉱
                                                                                       à
                                                                                                                                                                                                                                                   ò
```

ö

Gaps ..

Length 1752;

Score 180; DB 3; Length 17 Pred. No. 3.2e-51; 0; Mismatches 80; Indels

998 648 708

```
APPLICANT: Deneris, Evan S.
APPLICANT: Foodoro, Dmitry V.
APPLICANT: Foodoro, Dmitry V.
APPLICANT: Foodoro, Dmitry V.
APPLICANT: Hendricks, Timothy J.
TITLE OF INVENTION: Reagents and Methods for the Screening of Compounds
TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases
FILE REPERENCE: CASE-04027
CURRENT APPLICATION NUMBER: US/09/435,335
CURRENT APPLICATION NUMBER: 09/360,779
EARLIER PILING DATE: 1999-07-26
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 1752
                                                                                                                                   Sequence 1, Application US/09435335; Patent No. 6384204; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Rattus norvegicus
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; NAME/KEY: CDS
; LOCATION: (112)..(1131)
US-09-435-335-1
CCACCACC 836
                                                                                                              US-09-435-335-1
```

; Sequence 1, Application US/09360779; Patent No. 6268216; GENERAL INFORMATION: APPLICANT: Deneris, Evan S.

Gaps

5;

```
1011 GATGAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAA 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2210 GACGAGGCGCGCCGCGGCGGCGAGCGCAAGAGCAAGCCCAACATGAACTACGACAAG 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Calabreta, Bruno
APPLICANT: Storski, Tomasz
TITLE OF INVENTION: ANTISENSE
TITLE OF INVENTION: ANTISENSE
TITLE OF INVENTION: OLIGONUCLEOTIDES TARGETING COOPERATING ONCOGENES
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seidel, Gonda, Lavorgna & Monaco, P.C.
STREET: Two Penn Center, Suite 1800
CITY: Philadelphia
CUMTRY: U.S.A.
ZIP: 19102
COMPUTRY: U.S.A.
ZIP: 19102
COMPUTRY: IBM PS/2
COMPUTRY: IBM PS/2
COMPUTRY: BENDALE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 720 KD
COMPUTRY: WS-DOS
SOFTWARE: MAS-DOS
SOFTWARE: MAS-DOS
SOFTWARE: MONGBER: US/08/306,691B
FILING DATE: September 15, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: September 15, 1994
PRIOR APPLICATION NUMBER: 30,480
REFERENCE (DESTRATION NUMBER: 30,480
REFERENCE (JSS) S68-S549
TELLECOMMUNICATION INFORMATION:
TELEPRAN: (215) 568-S549
TELLECOMMUNICATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 1040 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1071 CTCAGCCGTGCACTTCGCTACTATGACAAAATATTATGACTAAAGTTCATGGTAAA 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2270 CIGAGCCGCCCTGCTAT-CTACTACGACAACATCATCATGAGCAAGGTGCATGGTAAG 2328
                                                                                                                                                                                                                 2091 AArgcargcadocadacadarccaderendocadrirerecradaderecradaeeeee
                                                                                                                                                                                                                                                                                                                                                                                                     891 AATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                  951 TCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACACGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1131 CGCTATGCCTACAATTTGCACGGAATCGCTCAGGCCCTCCAGCCTCAC 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2329 cécnhodochhodochindhonintochdeochadachdeochdonumho 2382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1604;
73.5%; Pred. No. 3.4e-40; ive 0; Mismatches 76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

8.6%; Score 124.6; DB 1;

Best Local Similarity 61.6%; Pred. No. 4.1e-32;

Matches 199; Conservative 0; Mismatches 124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-306-691B-43; Sequence 43, Application US/08306691B Fatent No. 5734039; GENERAL INFORMATION:
Best Local Similarity 73.5
Matches 216; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              999 ATGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGGAAAAGCAAAACCTAACATG 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1059 AACTATGACAAACTCAGCCGTGCACTTCGCTACTATGACAAAAATATTATGACTAAA 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1119 GITCAIGGIAAACGCIAIGCCIACAAAITIGAATIICCACGGAAICGCICCAGGCCCICCAG 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                           939 CTGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAG 998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709 AACTACGACAAGCTAAGTCGAGCACTGCGCTACTACTACGACAAAAACATCATGAGCAAG 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769 gracacededa a de contrace en contra de contraca e de contraca 
                                                                                                                                                                                                                      879 AGCCGTCTTGCAAATCCAGGGAGTGGGCAGTACAGCTATGGCAGTTCCTACTGGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            589 creecadacececadadececaecreearcecareadadececeaececaecadana
                                                                                                                                        0, Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10.3%; Score 148.4; DB 4; Length 2532;
                                      Score 180; DB 4; Length 1752;
Pred. No. 3.2e-51;
0; Mismatches 80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    En, Fe.

(Chen, Rui-.

(Chen, Rui-.

(Chen, Rui-.

(T: Chen, Qing A.

AT: Wehrman, Tom

ANT: Xue, Aidong J.

(CANT: Wang, Yonghong

(CANT: Mang, Jian-Rui

(LICANT: Zhou, Ping

(LICANT: Wang, Yonghong

(LICANT: Wang, Dunrui

(APPLICANT: Wang, Chiwei

(APPLICANT: NUNBER: US/09/620,312D

(CURRENT APPLICATION NUMBER: 09/552,317

(CURRENT FILING DATE: 2000-07-19

(CURRENT FILING DATE: 2000-01-21

(CURRENT PILING DATE: 2000-01-21

(CRRENT PILING DATE: 2000-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 869, Application US/09620312D
Patent No. 6569662
GENERAL INFORMATION:
                                      Query Match
Best Local Similarity 74.0%;
Matches 228; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Zhang, Jie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179 CCTCACCC 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCACCACC 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -09-620-312D-869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       СP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

ö

Gaps

ö

1134

1014 1386

1326

```
1267 CAGGCAGTGGACCAATCCAGCTATGGCAGTTTCTTCTGGAATTACTCACTGATAAATCCT
              CAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCA
                                                                                                                                GTCAGTCTTTTATCAGCTGGACAGGAGATGGCTGGGAATTCAAACTTTCTGACCCAGATG
                                                                                                                                                                                                            GCCGTGCACTTCGCTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCT
                                                                                        955 ACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAGACCCTGATG
                                                                                                                                                                        AAGTGGCTCGGCGTTGGGGAGGAAAAGCAAACCTAACATGAACTTATGACAAACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1135 ATGCCTACAATTTGATTTCCAC 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1603 ACGTGTACCGCTTCGTGCGAC 1625
                                                                                                                                                                                                                                                                                                                                1135 ATGCCTACAAATTTGATTTCCAC 1157
                                                                                                                                                                                                                                                                                                                                                                        1507 ACGTGTACCGCTTTGTGTGTGAC 1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-08-469-412A-1
'Sequence 1, Application US/08469412A'
Patent No. 5856125
', GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: CDS
; LOCATION: (291)..(1700)
US-09-344-579-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-344-579-1
                                                                                                                                                                          1015
                                                                                                                                    1327
                                                                                                                                                                                                                                                        1075
                     895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                셤
                                                                                        ર્જ
                                                                                                                        G
                                                                                                                                                             8
                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                   П
                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application PC/TUS9306251
GENERAL INFORMATION:
TAPPLICANT: Micketrom, Eric and Rife, Jason P.
TITLE OF INVENTION: Trivalent Synthesis of Oligonucleotides Containing
TITLE OF INVENTION: Stereospecific Alkylphosphonates and Arylphosphonates
NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSES: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
CITY: Garden City Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1207 accenecidacercadinaseacadederecidentecidecidecidecidecidecidecides 1266
                                                                                                             1267 caggcagragaccaarccagcrarggcagrircricragaarracrcacraaraarccr 1326
                                                                                                                                                       955 ACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAGACCCTGATG 1014
                                                                                                                                                                                             1327 GTCAGTCTTTTATCAGCTGGACAGGAGATGGCTGGGAATTCAAACTTTCTGACCCAGATG 1386
                                                                                                                                                                                                                                   1015 AAGTGGCTCGGCGTTGGGGAGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCA 1074
                                                                                                                                                                                                                                                                           1387 AGGTGGCCAGGAGATGGGGAAAGAGAAAAACAAAACCTAAGATGAATTATGAGAAACTGA 1446
                                                                                                                                                                                                                                                                                                                 GCCGTGCACTTCGCTACTACTATAAAAATATTATGACTAAAGTTCATGGTAAACGCT 1134
                                                                                                                                                                                                                                                                                                                                                  1447 gecerregectracerratraceacadadacarcarcacadagacagegegegadacer 1506
                                   1207 ACCGTGCTGACCTCAATAAGGACAAGCCTGTCATTCCTGCTGCTGCCCTAGCTGGCTACA 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CONTUTER READBLE FORM:

MEDIUM TYPE: PLOPDY disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: DEADBLE FORM:
SOFTWARE: PACHILI Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 19930630
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
8.6%; Score 124.6; DB 5;
Best Local Similarity 61.6%; Pred. No. 4.1e-32;
Matches 199; Conservative 0; Mismatches 124;
                                                                                                                                                                                                                                                                                                                                                                                               1135 ATGCCTACAAATTTGATTTCCAC 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                     1507 ACGTGTACCGCTTTGTGTGTGAC 1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Didgillo, Frank S.
REGISTRATION NUMBER: 31,346
REFRENCE/DOCKET NUMBER: 8586
TELEPHONE: 516-742-4343
TELEPHONE: 516-742-4343
TELEPK: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 1604 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
PCT-US93-06251-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Gar
STATE: NY
COUNTRY:
                                                                                                                                                                                                                                                                                                                 1075
                                                                           895
                                                                                                                                                                                                                                                                  Op
                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                 g
                                                                       ò
                                                                                                     D
                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1543 decededectracideratracidada da decenera de decedede de 1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1483 AGGTGGCCGCCGGTGGGGAAAGAGGGAAAATAAGCCCCAAGATGAACTACGAGAAGCTGA 1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1075 GCCGTGCACTTCGCTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGT 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1423 gecagreatreareageregageregagagagagagagagagaritraageregegaegare
1363 caddaadrocaccrarrcadcrordeddarrcrccrddadcrocrarcadaaarccr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      955 ACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1015 AAGTGGCTCGGCGTTGGGGAGGAGGAAAGCAAACCTAACATGAACTATGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          895 CAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 2268;
                                                                                                                                                                                                                                              Sequence 1, Application US/09344579
Patent No. 6054316
GENERAL INFORMATION:
APPLICANT: Brenda F. Baker
APPLICANT: Lex M. Coweart
TITLE OF INVENTION: ANTISENSE MODULATION OF ETS-2 EXPRESSION FILE REPRENCE: RFC-0063
CURRENT APPLICATION NUMBER: US/09/344,579
CURRENT FILING DATE: 1999-06-25
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

8.4%; Score 122.2; DB 3;
Best Local Similarity 66.5%; Pred. No. 3.6e-31;
Matches 175; Conservative 0; Mismatches 88;
```

```
Patent No. 6194547
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-021-715-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1014 GAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAACTC 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1074 AGCCGTGCACTTCGCTACTACTATGACAAAAATATTATGACTAAAGGTTCATGGTAAAAGGC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      894 CCAGGGAGTGGGCAGATACAGCTATGGCAGTŢCCTACTGGAGCTTCTGTCGGACAGCTCC 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246 TACCAGGGCGTCATTGCCTGGCAGGGGGACTACGGGAATTCGTCATCAAAGACCCTGAT 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           306 daggiegecegecreredegecerregedagrechagecechenigaarraceadadagere 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366 AGCCGGGCCCTGCGCTATTACTATAACAAGCGCATTCTGCACAAGACCAAGGGGAAACGG 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          186 ceredecreaadacadarecadereredecarrirarecredadecrecrecedades
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           954 AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

8.1%; Score 117.4; DB 2; Length 2667;
Best Local Similarity 63.1%; Pred. No. 1.8e-29;
Matches 181; Conservative 0; Mismatches 106; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1134 TATGCCTACAAATTTGCATTTCCACGGAATCGCTCAGGCCCTCCAGCC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrcaccracaacricaarricaacaaacregregregrearracee 472
APPLICANT: Mavrothalassitis, George J.
APPLICANT: Blair, Donald G.
APPLICANT: Fisher, Robert C.
APPLICANT: Ball Jr., Gregory J.
APPLICANT: Ball Jr., Gregory J.
APPLICANT: Athanasiou, Meropi A.
APPLICANT: Squras, Dionyssios N.
APPLICANT: Squras, The ERF Genetic Locus and Its Products NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 123..1769
OTHER INFORMATION: 'Anote= "human ERF (ETS2 Repressor
OTHER INFORMATION: Factor) cDNA"
                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEBM FC compatible
COMPUTER: IEBM FC compatible
COMPUTER: PROFINED BY
SOFTWARE: PATONIN DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/469,412A
FILING DATE: 05-UN-1995
CLASSIFICATION: 435
ATTONINEY/ASHT INFORMATION:
NAME: GAFFELT-WACKOWSKI, EUGENIA
REGISTRATION NUMBER: 37,330
REFERENCE/DOCKET NUMBER: 015280-229000
TELEPHONE: (415) 576-0200
TELEPHONE: (415) 576-0300
TELEPHONE: (415) 576-0300
TELEPHONE: (415) 576-0300
TELEPHONE: (415) 576-0300
SEQUENCE CHARACTERISTICS:
LENGTH: 2667 base pairs
                                                                                                                                                                                                                                             ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: CDNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-469-412A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쇰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

RESULT 11 US-09-021-715-1 ; Sequence 1, Application US/09021715

```
1014 GAAGTGGCTCGGCGTTGGGGAGAGAAGCAAACCTAACATGAACTATGACAAACTC 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1074 AGCCGTGCACTTCGCTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186 CCTGGCTCAAGGCAGATCCAGCTGTGGCACTTTATCCTGGAGCTGCTGCGGAAGGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           246 Taccagggggggtcatrgccrggggaggagggaggaggaarrcgrcarcaagacccrgar 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           366 Agciciogocicificatria de la particio del la particio de la particio de la particio de la particio de la particio del la particio de la particio del la particio de la particio del la particio del la particio de la particio del la particio del la particio del la particio della particio de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            894 CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     954 AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306 GAGGTGGCCCGGCTGTGGCAAGTGCAAGCCCCAGATGAATTACGACAAGCTG
                                                                                                        Blair, Donald G.
Fisher, Robert J.
Beal Jr., Gregory J.
Athanasiou, Meropia A.
Sgouras, Dionyssios N.
TITLE OF INVENTION: The ERF Genetic Locus and Its Products
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

8.1%; Score 117.4; DB 3; Length 2667;
Best Local Similarity 63.1%; Pred. No. 1.8e-29;
Matches 181; Conservative 0; Mismatches 106; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "human ERF (ETS2 Repressor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1134 TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    426 ircacciacaacircaarircaacaacrecrecrecrearracec 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94111-3834

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/021,715
FILING DATE: 10-P6b-1998
CLASSIFICATION: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Garrett-Wackowski, Eugenia
REGIETRATION NUMBER: 37,330
REFERENCE/DCKET NUMBER: 015280-229000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPRA: (415) 576-0300
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
GENERAL INFORMATION:
APPLICANT: Mavrothalassitis, George J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Factor) cDNA" SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 123..1769
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: CDNA
```

```
975 GAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTTGGGGGA 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1035 GAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTAC 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      228 accrcráargárágácadrirrahágcirrracággádadadagágrágóricgrereregégég 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       288 ATTCGCAAGAACAAGCCTAACATGAATTATGACAACTCAGCCGAGCCCTCAGATACTAT 347
                                                                                              245 rccAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGACAGCGCCAACGCCAGCTGTATCA 304
  185 ATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAACCCTGGAAGCGGGCAGA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               915 CTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .095 TATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTACAAATTTG 1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  348 raricraaadararcarcaaadadrgaarcarcaaagrrricrafacaagrrric 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Application US/09920759
; Sequence 10, Application US/09920759
; Patent No. 6537811
; GENERAL INFORMATION:
; APPLICANT: Brenda F. Baker
; APPLICANT: Brenda F. Preier
; TILE OF INVENTION: ANTISENSE MODULATION OF SAP-1 EXPRESSION
; FLLE REPRENCE: RTS-0267
; CURRENT APPLICATION NUMBER: US/09/920,759
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 91
; SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 1933;
                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/09920759
Patent No. 6537811
GENERAL INFORMATION:
APPLICANT: Brenda F. Baker
APPLICANT: Susan M. Freier
ITTLE OF INVENTION: ANTISENSE MODULATION OF SAP-1 EXPRESSION
FILE REPRENCE: RTS-0.267
CURRENT APPLICATION NUMBER: US/09/920,759
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 91
EBNGTH: 1933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 100.6; DB 4; Length
Pred. No. 9.2e-24;
0; Mismatches B4; Indels
                                                  910 TACAGCTATGGCAGTTCCTACTGGAGCT
                                                                                                                                           970 CCTGGGAGGCCACAAATGGGGAGT 993
                                                                                                                                                                                       305 ccreseadesaccaaceasir 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 64.3%;
Matches 151; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . NAME/KEY: CDS
. LOCATION: (150)...(1367)
US-09-920-759-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) NAME/KEY: CDS
; LOCATION: (150)...(1445)
US-09-920-759-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                     US-09-920-759-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                ò
                                                                                         a
                                                                                                                                      à
                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                 GENERAL INFORMATION:
APPLICANT: Aurias, Alain
APPLICANT: Delatire, Olivier
APPLICANT: Delatire, Olivier
APPLICANT: Decer, Thomas
APPLICANT: Decer, Martine
APPLICANT: Decer, Martine
APPLICANT: Plougastel, Beatrice
APPLICANT: Thomas, Gilles
APPLICANT: Thomas, Gilles
APPLICANT: Twens, Orens, Description
APPLICANT: Thomas, Gilles
APPLICANT: TWENSTION: NUCLEIC ACID CORRESPONDING TO A GENE OF
TITLE OF INVENTION: TRANSLATIONS ASSOCIATED NITH THE DEVELOPMENT OF CANCEROUS
TITLE OF INVENTION: TRANSLOCATIONS
TITLE OF INVENTION: TRANSLOCATIONS
TITLE OF INVENTION: TRANSLOCATIONS
NUMBER OF SEQUENCES: 129
CORRESPONDENCE ADDRESS:
ADDRESSEE: Weiser & Associates
STREET: 230 South Fifteenth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733 CTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCC---CACTCAGTCAA 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           850 AICCITATCAGAITCTIGGACCGACCAGCGGCGICTIGCAAAICCAGGAGIGGGCAGA 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65 CTTATGACTCAGTCAGAAGAAGAGCTTGGGGCAATAACATGAATTCTGGCCTCAACAAAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790 AAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCCTCAGTTAG 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
ო
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2; Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 8.0%; Score 115.2; DB 2; Length 3
Best Local Similarity 67.4%; Pred. No. 2.3e-29;
Matches 178; Conservative 0; Mismatches 83; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTER READBLE FORM:

ZIP: 19102

COMPUTER READBLE FORM:

MEDIUM TYPE: Flepy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ADELIT 1.0 DOS text editor

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/343,443B

FILING DATE: 18-NOV-1994

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/FR93/00494

FILING DATE: 19-MAY-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PS 2/06123

FILING DATE: 20-MAY-1992

ATTORNEY/AGENT INFORMATION:

NAME: Weiser: Gerard J.

REGISCHAUNICATION NUMBER: 19,763

TELEFOND: 215-875-8394

INFORMATION POR ERQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 328 base pairs

ITABE: nucleic acid

STRANDEDNESS: double
                                                Sequence 5, Application US/08343443B
Patent No. 5968734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 230 South
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:

// NAME/KEY:

// LOCATION:

US-08-343-443B-5
RESULT 12
US-08-343-443B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
ô
                                                                                                                                                                                                           975 GAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGA 1034
                                                                                                                                                                                                                                                                                                                      .035 GAGAAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTAC 1094
                                                                                                                                                        168 chgridechgrinchrchaechechgaageencagaacaagacangardargride 227
                                                                                                                                                                                                                                                                 228 ACCTCTAATGATGGGCAGTTTAAGCTTTTGCAGGCAGAAGAGGTGGCTCGTCTCTGGGGG 287
                                                                                                                                                                                                                                                                                                                                                                      288 ATTCGCAAGAACAAGCCTAACATGAATTATGACAAACTCAGCCGAGCCCTCAGATACTAT 347
                                                                                                     915 CTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCACCTGG 974
                                                                                                                                                                                                                                                                                                                                                                                                                            1095 TATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTACAATTTG 1149
                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               348 raigraaagaararcarcaaaaaagrgaargcagaagrrrgrgracaagrriig 402
                                                     .
0
Query Match 7.0%; Score 100.6; DB 4; Length 1976; Best Local Similarity 64.3%; Pred. No. 9.4e-24; Matches 151; Conservative 0; Mismatches 84; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: The PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/875,944B
FILING DATE: 07-AUG-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/875,944B
FILING DATE: 07-AUG-1997
RILING DATE: 07-AUG-1997
FILING DATE: 08-FEB-1995
FILING DATE: 08-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: BROWDY, ROGET L,
REGISTRATION NUMBER: EUJINGA=1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEQ. ID NO: 1:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ. ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 624 Ninth Street N.W., Ste. 300 STRIE: 0.C. Ninth Street N.W., Ste. 300 STRIE: D.C. COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08875944B
Patent No. 6096542
GENERAL INFORMATION:
APPLICANT: FUJINAGA, Kei
APPLICANT: FUSHIDA, Koichi
APPLICANT: HIGASHINO, Fumihiro
TITLE OF INVENTION: CANCER CONTROL
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSBE: BROWDY AND NEIMARK, P.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 2064 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
1..1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY:
; LOCATION:
US-08-875-944B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
US-08-875-944B-1
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1090 ACTACTATGACAAAATTATTATGACTAAAGTTCATGGTAAAGGCTATGCCTACAAATTTG 1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 910 TACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCA 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     956 recadorieredesartroregredecorrectedareaceaacaaareccearrocarre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                970 CCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTCGGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1016 céricia cececece de antica de la contra de contra d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1030 GGGGAGAGGAAAAGCAAACCTAACATGAACTATGACTAAACTCAGCCGTGCACTTCGCT
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                0
Query Match 6.6%; Score 96; DB 3; Length 2064; Best Local Similarity 62.5%; Pred. No. 3.7e-22; Matches 150; Conservative 0; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search completed: May 27, 2004, 19:27:30 Job time : 147 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

us-09-902-772-1.rnpb

```
Sequence 1, Appli
Sequence 3, Appli
Sequence 41, Appl
Sequence 1127, Ap
Sequence 98, Appl
Sequence 26, Appl
Sequence 26, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1124...pp
Sequence 195, App
Sequence 196, App
Sequence 197, App
Sequence 117, App
Sequence 710, App
Sequence 710, App
Sequence 710, App
                                                                                                                         (without alignments) 9078.980 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                    1 gaattoogogaacgaataat.......gaaagaaagogocaagaaaa 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/2/pubpna/PCT_MB_VENS_eeq:*

2: /cgn2_6/ptodata/2/pubpna/PCT_MB_VENS_eeq:*

4: /cgn2_6/ptodata/2/pubpna/US06_NUB_VENS_eeq:*

5: /cgn2_6/ptodata/2/pubpna/US06_NUB_VENS_eeq:*

6: /cgn2_6/ptodata/2/pubpna/US08_NUB_VENS_eeq:*

7: /cgn2_6/ptodata/2/pubpna/US08_NUB_VENS_eeq:*

8: /cgn2_6/ptodata/2/pubpna/US08_NUB_VENS_eeq:*

9: /cgn2_6/ptodata/2/pubpna/US09_NUBCOMB.seq:*

10: /cgn2_6/ptodata/2/pubpna/US09_NUBCOMB.seq:*

11: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

12: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

13: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

14: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

15: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

16: /cgn2_6/ptodata/2/pubpna/US09_NUB_VENS_eeq:*

17: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*

18: /cgn2_6/ptodata/2/pubpna/US00_NUB_VENS_eeq:*
                                                                                                        May 27, 2004, 17:48:07 ; Search time 725 Seconds
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-1

US-09-902-772-3

US-10-211-462-1127

US-10-211-462-1127

US-10-215-60-26

US-10-205-823-98

US-10-205-823-98

US-10-205-823-98

US-10-087-192-194

US-10-052-482-194

US-10-052-482-194

US-10-052-482-194

US-10-052-482-194

US-10-052-482-197

US-10-052-482-197

US-10-172-118-710
                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                          2960401 seqs, 2274450654 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                       OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                      IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length DB
                                                                                                                                                                               US-09-902-772-1
1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                    Sequence:
                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
```

Sequence 18410, A Sequence 1126, Ap Sequence 1123, Ap Sequence 1123, Ap	Sequence Sequence Sequence Sequence Sequence	equence equence equence equence Sequence	427 411, 936, 279	Sequence 21761 Sequence 1151 Sequence 869, Sequence 344, Sequence 1502 Sequence 1502	Sequence 347, App Sequence 23294, A Sequence 21294, A Sequence 41, Appl Sequence 27904, A Sequence 27904, A
m m	US-US-084-781-204-781-781-781-781-781-781-781-781-781-781	123-779-54 164-761-370 164-761-165 150-799-1	US-09-80-80 CS-08-60-80 CS-08-60-80 CS-08-80 CS-08-80 CS-08-80 CS-08-80 CS-08-60-80 CS-08-60-80-80 CS-08-60-80-80 CS-08-60-80-80 CS-08-60-80-80 CS-08-60-80-80-80 CS-08-60-80-80-80-80-80-	US-09-864-761-2176 S US-10-029-386-115 C US-10-037-270-809 6 US-10-117-722-869 3 US-10-087-129-344 2 US-10-152-319A-156	US-10-918 995-84 US-09-918 995-84 US-09-864-761-232 US-10-210-120-41 US-09-918-995-27 US-09-925-300-420
				25 25 25 25 25 25 25 25 25 25 25 25 25 2	
200 200 200 200 200 200 200 200 200 200	22222	1.61 1.71 1.21 1.21 4.4.	111111111111111111111111111111111111111	111111 1001 1000 1000 1000 1000 1000 1	
387 387 386	28 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	276.6 255 255 180 180	167.8 166.2 163.2 163.2		122.3 122.4 122.2 122.2 122.2
				1 M W W W W W W W W W W W W W W W W W W	
	υ υ	បប	0 000		O

ALIGNMENTS

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 TTATGGCAAGCACTATTAAGGAAGCATTATCAGTGGGTGAAGTGAAGACCAGTCCTTGTTTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGTGCCTACGGATCGCCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
S-09-902-772-1
Sequence 1, Application US/09902772
Sequence 1, Application US/09902772
Patent No. US20020164739A1
GENERAL INFORMATION:
APPLICANT: Chugai Seiyaku Kabushiki Kaisha, 5001, Iwamoto et
TITLE OF INVENTION: the Proteins Suppressing Proteins and Genes of
TITLE OF INVENTION: the Proteins RILE OF INVENTION: the Proteins RILE OF INVENTION NUMBER: US/09/902,772
CURRENT FILING DATE: 2001-07-12
PRIOR APPLICATION NUMBER: US/08/878,177
PRIOR FILING DATE: 1997-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GAATTCCGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%; Score 1447; DB 9; Length 1447;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1447; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA; C-11 gene, c-erg gene w/ deletion, chicken DNA US-09-902-772-1
                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

	RESULT 2 US-09-902-772-3 is Sequence 3, Application US/09902772 sequence 3, Application US/09902772 sequence 3, Application US/09902772 sequence 3, Application US/09902772 sequence 3, Application US/09002772 GENERAL INFORMATION: TATLE OF INVENTION: Cell Calcification Suppressing Froteins and Genes of TITLE OF INVENTION: the Proteins TITLE OF INVENTION: the Proteins TITLE OF INVENTION: the Proteins CURRENT FILING DATE: 105/0902.772 CURRENT FILING DATE: 1997-06-18 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 3 LENGTH: 1528 TYPE: DNA ORGANISM: c-erg gene, chicken DNA	93.7%; Score 1356; DB 9; Length 1528; servative 0; Mismatches 0; Indels 81; Gaps (SGGAACGAATAATTAATTAGCAATTATTAGCGATCAATAATCTTGATCACA CGGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA CGGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA CGGCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACA CGGCGAACGAATAATTATTAGCAATTATTAGCGATCAATTAGATCACAC CAAGCACTATTAAGGAAGCATTATCAGTGGTGATGAAGACCAGTCCTTGTTTG CGGCGAACGATTATCAGTGGTGAAGACCAGTCCTTGTTTG CGTACGGATCGCCCACCTTGCAAAGACAGAATGACAGCCTCCTTTCCAGTG CGTACGGATCGCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTG CGTACGGATCGCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTG CGTACGGATCAAAGAAAGACAGAAATGACAGCCTCCTCTTCCAGTG CGCAAACATCAAAGAAAGCCGCGCGCTCCCCAGCAGGACTGGTTATCACAGCGGCAAAAATCAAAGACAGGATTCCCCAGCAGGACTGGTTATCACAGACTGCCAAAAAAAA	Qy 241 CCCGGCCAGATTACCATTAAGATGAAGCCGAACCAGAGGTTAATGGGTCAAGGA 300 Db 241 CCCGGCCAGAGTTACCATTAAGATGAGAGGAGGAAAACCAGGTTAATGGGTCAAGGA 300 Qy 301 ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAAGCAGTTCAGACAATG 360 Db 301 ATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAAGCAGTTCAGACAATG 360 Qy 361 TTGGGATGAACTATGGAAGCTACATGGAAGAGAAAATATCCGCCTCCCAAATATGACAA 420 Db 361 TTGGGATGAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCCAAATATGACAA 420 Qy 421 CCAATGAACGAAGGTTATTGTGCCAGCAGAACATATGGAGCACAGACCATGTAC 480 Db 421 CCAATGAACGAAGATTATTGTGCCAGCAGAACCTTATGGAGCACAGACCATGTAC 480 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
181	421 CCAATGAACGAAGAGTTATTGTGCCAGCAGATCTACGGTTATGGAGCACAGACCATGTAC 480 421 CCAATGAACGAAGAGTTATTGTGCCAGCAGATCTTATGGAGCACAGACCATGTAC 480 421 CCAATGAACGAAGAGTTATTGTGCCAGCACATTATGGAGCACAGACCATGTAC 480 481 GGCAGTGGCTGGAGTGGCAGTGAAGAGTATGGTTTCCAGACGTCTTGTTGT 540 481 GGCAGTGGCTGGAGTGGAGAGAGTATGGTTTCCAGACGTCTTGTTGT 540 541 TCCAGAACATTGATGGGAAAGAGTTGTATGGTTTCCAGACGACTCTTGTTGT 540 541 TCCAGAACATTGATGGGAAAGAGTTGTAAAATGACCAAAGATGACTTCCAGAGACTCA 600 601 CCCCGAGCTATAAACGCAGATATCCTCCTGTCACACTACCTCCAGAGAGAG		CACTTGGCTACTACTATGACAAAATTATGACTAAAGTTCATGAAAATCGTG CACTTGGCTACTACTATGACAAAATTATGACTAAAGTTCATGGTAAACGTGTG CACTTGGCTACTACTATGACAAAAATTATATGACTAAAGTTCATGGTAAACGTATGCCT CACTTGGTTACTACTATGACAAAAATTATTATGACTAAAGTTCATGGTAAACGCTATGCCT ACAAATTTGATTTCCACGGAATGGTCAGGCCCTCCAGCCTCACCTCCAGAATCATCCA ACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCACCCCCCAGAATCATCCA TGTACAAAAAATACCCATCAGGCCCTCCAGCTCCAGCCCCCCAGAAGAATCATCAAAATACCCATCAGACACCCCCCAAAGAATTATGATATCCAAAAAAATACCCATCCCCCTACATGAGTTCCTACCATGCACCCCCCAAAGAATTATTTGAAAATACCCATCCCCCTACATGAGTTCCTACCATGCACCCCCCAAAGAATTTTTTGAAATTTTTTGAAATTTTTTGTAGCTCCCTACTCCATCCCCTACTACCATCCCCCAAAAAATTTTTT

m

유

ò

음 장

역 경 원

 $\dot{\delta}$ 엄 8 a à 8 8

```
US-1U-211-462-41

Sequence 41, Application US/10211462

Publication No. US20040033495A1

GENDRAL INFORMATION:

APPLICANT: Mutray, Richard

APPLICANT: Mutray, Richard

APPLICANT: Matsana

APPLICANT: Matsana

APPLICANT: Bos Biotechnology, Inc.

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Modulators

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis Modulators

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis Modulators

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis Modulators

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis Modulators

TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis Modulators

TITLE OF INVENTION NUMBER: US/10/211,462

CURRENT APPLICATION NUMBER: US 69/791,390

PRIOR FILING DATE: 2001-02-22

PRIOR APPLICATION NUMBER: US 60/310,025

PRIOR APPLICATION NUMBER: US 60/310,025

PRIOR APPLICATION NUMBER: US 60/310,025

PRIOR REPLING DATE: 2001-01-29

NUMBER OF SEQ ID NOS: 200

SOFTWARE: PatentIn Ver. 2.1

TYPE: DNA

TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93 AACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCTCCAGCGACTATGGACAGAC 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGAAGGAACTGTGCAAGATGACCAAGGACTTCCAGAGGTCACCCCCAGCTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             273 AIGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCAGACACCGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134 ATCGCCCCACCTTGCAAAGACAGAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      153 TTCCAAGATGAGCCCACGCGTCCCTCAGCAGGATTGGCTGTCTCAACCCCCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314 CIGCAGCGIGGCAAAAGGAGGGGAAAAIGGITAGCAGITCAGACAAIGITGGGAIGAACIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374 TGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          393 AGTIATCGTGCCAGCAGAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAGTGGGAGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCAGATATCCTCCTGTCACACCTACCTACCTCAGAGAGA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
63.6%; Score 921; DB 13;
Best Local Similarity 81.1%; Pred. No. 1.4e-294;
Matches 1100; Conservative 0; Mismatches 245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
US-10-211-462-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAA 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAA 1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      666
                                       540
                                                                               600
                                                                                                                     600
                                                                                                                                                               654
                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                               759
                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
540
                                                                                                                                                                                                                                               654
                                                                                                                                                                                                                                                                                   661 TICCACATITGACTICAGAIGAIGITGATAAGGCCTTACAAAACTCTCCACGGTTAAIGC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 TCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGAATGACTTCCAGAGAACTCA
                                                                                                                                                                                                                                                                                                                                                        121 ATGCTAGAAACACAGAGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081 TGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCATCCAGCTTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCCATCTTGGCACCTACTAGTAAG
                          GGCAGTGGCTGGAGTGGAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT
                                                                                                                                                               CAACGCAAAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                     GGACGAGTCACAGCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACGAGTCACAGCCATCCACTCAGATCAAAGCTACCCCAACCATCATCATCATCAAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGAGGAAAAGCAAACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TICATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCGTCTTGCAAATCCAGGGAGTGGGCAGTACAGCTATGGCAGTTCCTACTGGAGCTTC
<u>GGCAGTGGCTGGAGTGGGCCAGTGAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGGAAAGAAAGAAGCGCCAAGAAAA 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      880
                                     181
                                                                               541
                                                                                                                                                           601
                                                                                                                                                                                                     601
                                                                                                                                                                                                                                             655
                                                                                                                                                                                                                                                                                                                               655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q Q
```

g

CD $\dot{\circ}$ 장염

g

8 - qq

ò

8 8

g

 δ

8 B 8

8

373

332 433 493 452 553

193

92

253 212 313 272 572

664

g

Š 셤 à g ò 유 ò 음 දු ද

6 B

```
1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             992
                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                             212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      932
                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                      152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      813 TCAGITAGAICCTTAICAGAITCTIGGACCAACAAGAAGTAGCCGCCTIGCAAAICCAGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCATCACCTGGGAGAGACACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     213 caccarcaaariggaargraaccragccaggrgaarggcrcaaggaacrcrccrgarga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   314 CIGCAGCGIGGCAAAAGGAGGGAAAAIGGITAGCAGTICAGACAAIGTIGGGAIGAACIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  273 ATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCCAGACACGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           374 TGGAAGCTACATGGAAGAAGAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGGCGGTGAAAAAAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAACATCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCAGATATOCTCCTGTCACACCTACACTCCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAITITACCITATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       753 ccadrogaaaccrocrocarcorrocacacacaaacroaaaaccaaaaccacaccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                                                                                                33 rarcaaccaaccrrarcacrrereacreaccaccacrerrerreacrecerre
                                                                                                                                                                                                                                                                                                             134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                 93 AACGCCACACCTGGCTAAGACAGAGATGACGGGTCCTCCTCCAGCGACTATGGACAAACA
                                                                                                                                                                                                                                                                                                                                                                                                    194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCCGGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                             153 Trocaadardadeceaedederecereaddadadarraderigrereaaeeeege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTIATIGICCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          393 AGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    782 TCAGTCAAAAGCTACCCAACCATCTTCAACAGTGCCCAAAACAGAAGACCAGGGTCC
                                                                                                                                                                            Gaps
                                                                                                                                                                          12;
                                                                                                                               Length 1389;
                                                                                                                                                                                                                       74 TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGT
                                                                                                                                                                            Indels
                                                                                                                               Score 921; DB 13;
Pred. No. 1.4e-294;
0; Mismatches 245;
                                                                                                                               Query Match
Best Local Similarity 81.1%;
Matches 1100; Conservative
                                                                     sapiens
                     LENGTH: 1389
TYPE: DNA
ORGANISM: HOMO
                                                                                      US-10-087-192-1127
SEQ ID NO 1127
LENGTH: 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     453
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . <u>Q</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGCGCTGGGGGAGGCGGAAGAGCAAACCCAACATGAACTACGATAAGCTCAGCCGCGC 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     752
                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                812
                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                         872
                                                                                                                                                                                                                                                                                                                                                                                                                                                 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        992
                                                                                      692
                                                                                                                               781
CGCCGACATCCTTCTCTCACATCTCCACTACCTCAGAGACTCCTCCTTCCACATTTGAC 632
                                                                                                                                                                                                                                                                                                                                                                                                    TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCCTA
                                                                                                                                                              TCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAATTCCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGTTCGACTTCCACGGGATCGCCCAGGCCTCCAGCCCCACCCCCGGAGTCATCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCAAACCCATACTGGAATTCACCAACTGGGGTATATACCCCAACACATAGGCTCCCCAC
                                                                                 Trcagargargargaraaagcerracaaagteecacgerraargeergeragaaga
                                                                                                                               AGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                     TCAGTCAAAAGCTACCCAACCATCATCATCAACAGTGCCCAAAACAGAAGACCAGCGTCC
                                                                                                                                                                                                                                                              ccadrogaaadcrocaccarcrectrocacagaccaaaacrgaagaccagcgroc
                                                                                                                                                                                                                                                                                                             TOAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCATCACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTICGCIACIACIATGACAAAAIATIATGACIAAAGITCAIGGIAAACGCIAIGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGGCCTCACCCTCCAGAATCATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC
                                           TITITITICCAAATACATCAGTITACCCAGAAGCAACGCAAAGAATAACAACAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description of the control of the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-10-087-192-1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1353
                                                                                                                                                                                                                                                                753
                                                                                                                                                                                                                                                                                                             842
                                                                                                                                                                                                                                                                                                                                                                                                                                               873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1293
573
                                                                                                                               725
                                                                                                                                                                          693
                                                                                                                                                                                                                                                                                                                                                         813
                                                                                                                                                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               962
                                           665
                                                                                      633
                                                                                                                                                                                                                     782
```

\$ 6 5 6 5 \$ 6 5 6 5

g ò 엄 П

8

d

ò g

 $\dot{\delta}$

Ŋ

 δ

δ

ò

```
1009 CCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAAGAACCAGCGTCC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1069 TCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAATCCAGGCAG 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1249 cceececreeceacacecearcaceaarcccaacarcarcarracearaacrcaecece 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     708
                                                                                                                                      408
                                                                                                                                                                                                                               468
                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                     588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  889 Treagargargrahaageerracaaaacrereeacgerraargeargeraaaacae 948
                        649 AGTTATCGTGCCAGCAGCAGCAACCTACGCTATGGAGTACAGACCATGTGCGGCAGCAGGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAGATATCCTCCTGTCACACTACACTCCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949 AGATTTACCATATGAGCCCCCCCGGGAGATCAGCCTGGACCGGTCACGGCCACCCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1129 TGGCCAGATCCAGCTTTGGCAGTTCCTCTGGAGCTCCTGTCGGACAGCTCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGATCCCGACGACGAGGTGGC
                                                                                                                                                                                                                                                                                                          469 CACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGGAACTCTCCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                     529 ATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCCAGACACCGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374 TGGAAGCTACATGGAAGAGAAGCATATTCCGCCTCCAAATATGACAACCAATGAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                554 TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCGGGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     769 IGGGAAGGAACTGTGCAAGATGACCAAGACGACTTCCAGAGGCTCACCCCCAGCTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      829 edeceacarecreterenearetrecaetracereasasasasaerecreteerearease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITIATITITCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                      134 ATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAAC
                                                                                                                  725 AGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGITAGATCCTTATCAGATTCTTGGACCGACCAGCGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                  194 ATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGCACTGGTTATCACACCCCCCCGGGCCAGAGT
                                                                                                                                                                                                                   254 TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                        CTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              709 Greecesreaasaararescerrecasescercaacarerrerrarrecasaacaresa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           782 TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAAAAAGACCAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1022 TCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACTAAAACTCAGCCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGITAITGIGCCAGCAGAICCIACGITAIGGAGCACAGACCAIGIACGGCAGIGGCIGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGGCAGTGAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1082
                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
74
                                                                                                                         g
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                      9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
2
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                      ò
                                                                                                                                                                             ઠે
                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Publication No. UG20030108963A1
GENERAL INFORMATION:
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Bradege, Wilson C.
APPLICANT: Bradege, Wilson C.
APPLICANT: Bradege, Wilson C.
APPLICANT: Bradege, Wilson C.
APPLICANT: Agentian
APPLICANT: Admetar, Shubhangi
APPLICANTON NUMBER: US/10/20; 823
CURRENT PILING DATE: 2001-09-25
PRIOR FILING DATE: 2001-09-25
PRIOR PLILNG DATE: 2001-12-12
PRIOR PLILNG DATE: 2001-12-12
PRIOR PLILNG DATE: 2001-12-12
PRIOR PLILNG DATE: 2001-09-25
PRIOR PLING DATE: 2001-09-05
PLONDARYHORE PRESEMENT PARABER PARABER
                                                                                                                                                                                                                                                                              1261
                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                      1141
                                                                                                                                                                                  1201
                                                                                                                                                                                                                               1172
                                                                                                                                                                                                                                                                                                                           1232
                                                                                                                       CCTCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCCTA 1112
                                                                                                                                                                                                                                                                                                                                                                                                                     GAACTTTGTGGCGCCCCACCCTCCAGCCCTCCCCGTGACATCTTCCAGTTTTTTTGCTGC 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC 1381
                                                                                                                                                                                  CAAATTTGATTTCCACGGAATCGCTCAGGCCTCCAGCCTCACCACCAGAATCATCCAT
                        993 CCGGCGCTGGGGAGAGCGGAAGAGCAAACCCAACATGAACTACGATAAGCTCAGCGGGC
                                                                                                                                                                                                                GTACAAGTACCCCTCAGACCTCCGTACATGGGCTCCTATCACGCCCACACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTICGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTA
                                                                                                                                                                                                                                                                              GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                        GAACTITGTAGCTCCCCATCCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 3166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
63.6%; Score 921; DB 15; Length 3
Best Local Similarity 81.1%; Pred. No. 2.5e-294;
Matches 1100; Conservative 0; Mismatches 245; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1382 IGCICATATGCCTTCCCATCTTGGCACCTACTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 98, Application US/10205823
Publication No. US20030108963A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-205-823-98
                                                                                      1082
                                                                                                                                   1053
                                                                                                                                                                                1142
                                                                                                                                                                                                                             1113
                                                                                                                                                                                                                                                                            1202
                                                                                                                                                                                                                                                                                                                           1173
                                                                                                                                                                                                                                                                                                                                                                                                                     1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1322
                                                                                                                                                                                                                                                                                                                                                                        1262
                             g
                                                                                                                         g
                                                                                                                                                                             ò
                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
```

유 ઠે g $\dot{\delta}$ d ò a ें d

```
1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCACCTCCAGAATCATCCAT 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                             948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                       708
                                                                                                                                                553
                                                                                                                                                                                         768
                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                                                                                   664
                                                                                                                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                                                    724
                      648
                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cedececredesadasesadas de caracara de contra contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  889 ircagargargargaraagcerracaaaacrerecacgaraargeargeragaaacae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAGITAGAICCITAICAGAITCITGGACCGACCAGCAGCGCGTCITGCAAAICCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCATCACCTGGGGGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crecarcactreeeaaeecaccaaceaedeacriteaaeareacearceeaceaecea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1082 ACTICGCIACIACIAIGACAAAATAITAIGACIAAAGITCAIGGTAAACGCIAIGCCIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGTICGACTICCACGGGATCGCCCAGGCCTTCCAGCCCCACCCCCGGAGTCATCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĠAACTTTGTGGCGCCCCCCCCCCCCGGGGCCTGACATCTTCCAGTTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dreedecateraareaarareecerrecagacerrecagacereereereereereereer
                                                                                                                                                                                                                                    TGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAITITACCTIAIGAGCAAGCGAGGAGAICAGCGIGGACGAGICACAGCCAICCCA---C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1022 TCGGCGTTGGGGAGAAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTTTGCTGC
                                                                                          GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                  TITIAITITITCCAAATACATCAGTTTACCCAGAAGCAACGCAAGGAATAACAACAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            782 TCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCC
                                                                 AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                              GTGGGCACTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                     CGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCATATGCCTTCTCATCTGGGCACTTACTACTAA 1645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1382 TGCTCATATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                            649
                                                                                                                                                                                         709
                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                            694
                                                                                                                                                                                                                                                                                                                     614
                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1549
                        589
                                                                   434
                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8 8
                                                      õ
                                                                                            q
                                                                                                                                                  8 8
                                                                                                                                                                                                                        $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 26, Application US/10021660

Publication No. US20030152926A1

GENERAL INFORMATION:

APPLICANT: Murray, Richard

APPLICANT: Watson, Suean R.

APPLICANT: Watson, Suean R.

APPLICANT: Glynne, Richard

APPLICANT: Watson, Suean R.

TITLE OF INVENTION: Compositions and Methods of Diagnosis of Angiogenesis,

TITLE OF INVENTION: Compositions and Methods of Screening for Angiogenesis,

TITLE OF INVENTION: Modulators

TITLE OF INVENTION: Modulators

FILE REFERENCE: 018501-000710US

CURRENT APPLICATION NUMBER: US/09/784,356

PRIOR FILING DATE: 2001-12-06

PRIOR FILING DATE: 2001-02-14

PRIOR FILING DATE: 2001-08-11

NUMBER OF SEQ ID NOS: 135

SEQ ID NO 26

LENGTH: 3166

LENGTH: 3166
                                                                                                                                1488
                                                                                                                                                                                                               GAACTITIGIGGGGGGGCGCCCCCGGGGGGGGACAICTICCAGTITITIGCTGC 1548
                                                                                                                                                                                                                                                                                        CCCAPACCCATACTGGAATTCACCAACTGGGGGTATATACCCCCAACACTAGGCTCCCCAC 1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                          CCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGG 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCACCACAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A CCCCACACCTGCCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTATGGACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCCAGCCCAGACACCGTTGGGATGAACTA
      CAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATCCAT
                                 CAAGTTCGACTTCCACGGGATCGCCCAGGCCCTCCAGCCCCACCCCCGGAGTCATCTCT
                                                                                        GTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGAT
                                                                                                                                                                         GAACTITGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTAAGGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCAAGGAAGCCTTATCAGTTGTGAGGACCAGTCGTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCGCCCCCCCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGCCCCCGGCCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caccarcaaariddaargraaccradccaddraarddcrcaaddaacrccrcarda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 3166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                            1382 IGCTCATATGCCTTCCCATCTTGGCACCTACTACAA 1418
                                                                                                                                                                                                                                                                                                                                                                                    cagccarardccricarcagededecriaciae 1645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 921; DB 15; I
Pred. No. 2.5e-294;
O; Mismatches 245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 81.1%;
Matches 1100; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
CRGANISM: Homo sapiens
US-10-021-660-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314
                                                                                                                                1429
                                                                                                                                                                                                                                                                                                 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                             1369
                                                                                        1202
                                                                                                                                                                                                                  1489
                                                                                                                                                                                                                                                          1322
                                                                                                                                                                         1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1219
                                                                                                                                                                                                                                                                                                                                                                          CACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGAG 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
9
                                                                                                                                                                                                                                                                                                                                                                                                                              918
                                                                                                    738
                                                                                                                                                                                                                                                                979
640 GCATGCCAGAAACACAGGGGGTGCAGCTTTTATTTTCCCAAATACTTCAGTATATCCCGA
                                                                                                                                                                                                         739 GATCCTGGGACCGACCAGTAGCCGCCTTGCTAATCCAGGTAGTGGCCAGATCCAGCTGTG
                                                                                                                                                                                                                                                                  GCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAACTGCATCACCTGGGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                        859 CACCAACGGGGAGTTCAAGATGACAGACCCGGACGAGGTGGCTCGGCGCTGGGGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 979 CABABACATCATGACCACAGGGAAGCGCTACGCCTACAAGTTTGACTTCCACGG
                                                                                                    GATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATG
                                                                                                                                                                                                                                                                                                                GCAGTTCCTGCTCGAACTCCTGTCAGACAGCTCCAACTCCAACTGCATCACCTGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1040 GAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACTACTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919 daagaggaaggccaacargaactargacaagcrcaggcggcgccrcgcracracracga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAAATATTATGACTAAAAGTTCATGGTAAACGCTATGCCTACAAATTTGATTTCCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1160 AATCGCTCAGGCCCTCCAGCCTCAGAATCATCCATGTACAAATACCCATCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1220 CCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1099 CCTGCCATACATGGGCTCCTATCACGCCCACCCCAGAAGATGAACTTTGTGTCTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1159 CCCTCCCGCTCTCCCAGTCACATCTTCCAGTTTCTTTGCTTCCCCGAACCCATACTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCA
                                                      ACCATCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCCTCAGTTAGATCCTTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCCCTGCTTTGCCCCGTAACCTCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 195, Application US/10052482;
Sequence 195, Application US/10052482;
Publication No. US20040072264A1
GARBEAL INFORMATION:
TITLEOF ENTYMENTON:
TITLEOF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER;
FILE REPERENCE: A-11087/RMS/DCF
CURRENT APPLICATION NUMBER: US/10/052,482
CURRENT APPLICATION NUMBER: US/09/747,377
FILE PRILING DATE: 2000-103-08
FRIOR PILING DATE: 2000-12-22
FRIOR FILING DATE: 2000-12-22
FRIOR FILING DATE: 2000-13-02
FRIOR FILING DATE: 2000-13-02
FRIOR FILING DATE: 2001-03-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1359,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
39.4%; Score 570.2; DB 12;
Best Local Similarity 66.8%; Pred. No. 6.3e-178;
Matches 917; Conservative 0; Mismatches 423;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1400 TCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1279 CCTGGGCACCTACTACTA 1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-052-482-195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-052-482-195
                                                      800
                                                                                                    700
                                                                                                                                                           860
                                                                                                                                                                                                                                                                920
                                                                                                                                                                                                                                                                                                                      799
                                                                                                                                                                                                                                                                                                                                                                          980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1280
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \dot{\delta}
                                              ò
                                                                                         q
                                                                                                                                                        ઠે
                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 ACACCTGGCTAAGACAGAGATGACCGCATCCTCCTTCCAGTGACTATGGCCAGACATCCAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260 TAAGATGGAGTGTAACCCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGACTGCAG 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACATGGAGGAGGATGTGCCGCCTCCCAATATGACCACAAATGAGCGCAGAGTGAT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421 GGTGAAAGAATATGGCCTCCTCGATGTGGACGTCTTACTATTTCAGAATATCGATGGGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        680 TACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAACAAGGCCAGATTTACCTTATGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAAGCGAGGAGATCAGGGTGACAGGCCATCCCACTCAGTCAAAGCTACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAGGCCTTGTCAGTTGTGAGCGAGGACCAGTCACTATTTGAGTGTGCCTACGGAACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140 CCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGGGCAAACATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200 GATGAGCCCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCGGCCAGAGTTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 CAAGATGGAGTGCAACCCTAGTCAGGTGGATGGTTCCAGGAACTCACCTGATGAGTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGAATGATGAACTATGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440 TGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGAGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961 CGTCCTGCAGATCCTACTCTGTGGAGCACAGACCATGTCCGACAGTGGCTGGAGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              500 AGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGATGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481 GGAGCTGTGCAAGATGACAAAGGATGACTTCCAGCGGCTCACGCGGAGCTACAATGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              585 CÁCATCTGACTTCCGÁTGACGTTGATAAGGCTTTACAAA-----CTCTCCACGGTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAAGCATTATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGGATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560 AGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAACGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52.7%; Score 763.2; DB 13; Length 1297; llarity 75.3%; Pred. No. 4.1e-242; Conservative 0; Mismatches 288; Indels 42;
                                                                                      APPLICANT: Morris, David W.
APPLICANT: Brgelhard, Eric K.
ITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR ITLE OF INVENTION: OANCER
FILE REFERENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT FILING DATE: 2002-03-01
PRIOR PELICATION NUMBER: US 09/794,377
PRIOR PELICATION NUMBER: US 09/796,586
PRIOR PELICATION NUMBER: US 09/796,586
NUMBER OF SEQ ID NOS: 2059
SOFTWARE: FastSEQ for Windows Version 4.0
FRIOR 1124
                 ; Sequence 1124, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
CRGANISM: Mus musculus
US-10-087-192-1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 1008; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
```

à qq 8 g g ò Q à g ર્જ DD ò ВÞ ò В

8

음 ò 엄 8 a

à

σ

```
ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 8
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1309
                                                                                                                                                                                                                                                                                                                                        1069
                                                                                                                                                                                                                                                                                                                                                                                                            1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acarccargracaagrarcccrcrdararcrccracargccrrccracargccarcaa 1429
                                                                                                                                                                                                                                                                                           950 TCTGGCCTCAACAAAGTCCTCCTTGGAGGATCACAGACCATGGGCAAGAACACTGAG 1009
                                                                                                                                                                                                                                                                                                                                                                                  1070 ccredeadredecadarccadcreredadrircreredaacracreredadadadadad 1129
                                                                                                                                                                                                                                                                                                                                                                                                                           1310 rargectacaagrirgacrirccargecarreceagecerecaeceaeceaeaeaaa 1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAAGAIGAACTITGIAGCICCCCAICCCCCGGGTTTGCCCGGTAACCICAICCAGCTTT 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cadaaddrigaachtrighcccencraccarccracardccreheachtcricchccadchrc 1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCAAATACCAGG 1373
                                                                                                                                                                                                                                                                                                                                                                8
8
8
8
                                                                                                      775
             655
                                   536
                                                          715
                                                                                 596
                                                                                                                             959
                                                                                                                                                    834
                                                                                                                                                                           GGAGCCACTITIATITITICCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA 716
                                                                                                                                                                                                  889
                                                                                                                                                                                                                        773
                                                                                                                                                                                                                                              890 GTCAAGGAAGACCCTTCTTATGACTCTGTCAGGAGGAGGAGCATGGAACAATAATATGAAC 949
                                                                                                                                                                                                                                                                                                                   AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAAGTGCATGGCAAAAAG
GTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                      TTCTTCCAGAACATGGATGGCAAGGAATTGTGTAAAAATGAACAAGGAGGACTTCCTCCGA
                                                                                                                                                 GCCACCTCCGCCTACAACACAGAAGTGCTGTTGTCGCACCTCAGTTACCTCAGGGAAAG
                                                                                                                                                                                                -----trcacrecrescrataacacaaccrecaracacacagaccagrecrescrataar
                                                                                                                                                                                                                                                                     CATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAC
                                                                                                                                                                                                                                                                                                                                                                CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                            AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAAGTTCATGGTAAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrrogagicagicarcacaaracregacricicicicacregearcraricaaacceeagr
                                                          GITCGACAGIGGCTGGAGTGGGCTATAAAGGAATACGGATTGATGGAGATTGACACTTCC
                                                                                                                             717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACA---GC
                                                                                TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1374 CIGCCAGCIGCICAIA-----IGCCIICCCAICIIGGCACCIACIACIA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Greececcaretakacacecacaretecricacaetrasecaetacraera 1602
                                                                                                                                                                                                                                                                                                                                           1010 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1134 '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1254
                                  477
                                                          959
                                                                                                     716
                                                                                                                             597
                                                                                                                                                                           657
                                                                                                                                                                                                                                                                      774
                                                                                                                                                                                                                                                                                                                   834
                                                                                                                                                                                                                                                                                                                                                                 894
                                                                                                                                                                                                                                                                                                                                                                                                             954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                      Ωp
                                                                                                                                                                                         음
장
                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                            중 점
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                            ઠે
                                                                              8 8
                                                                                                                         8 8 8
```

RESULT 10
US-10-052-482-198
; Sequence 198, Application US/10052482
; Publication No. US20040072264A1
; GENERAL INFORMATION:

9 777 CC---CACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAC 833 706 rcrescercakcaakkerecheecerreskessekeakkeareakkesarakkakaraekske 765 416 596 656 590 716 645 179 120 239 180 299 231 300 AATTCACCTGATGACTGCAGGGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAAT 359 291 aaccccandaacnacaacadchararddaadadaaaadaaragcccccccrccrccaacard 351 476 411 GTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG 536 471 531 9 646 GTCAAAGAAGACCCTTCTTATGACTCAGTCAGAAGAGGAGCTTGGGGCCAATAACATGAAT 717 ACAAGGCCAGATTTACCTTATGAGCAAGGGAGAGTCAGCGTGGACGAGTCACAGCCAT GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG 181 cc-----AdrigagercaAcercaAccagarargacacacargaargaarcaag 360 GTTGGGATGAACTATGGAAGCTACATGGAAGAGAAGCAT---ATTCCGCCTCCAAATATG ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT 352 ACCACCAACGAGAGAGAGTCATCGTCCCCGCAGACCCCACACTGTGGACACAGAGGATA 412 grandechariederredagrandecentahaedagracaecridaredagaredackearee TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA 472 TITITICCAGAACAIGGAIGGCAAGGAACTOTGIAAAATGAACAAAGAAGAGACTICCICCGC 597 CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACCTCAGAGAGA 532 gecalceacerchacadeacecangidenterioneachecicaentacerchegeaaad 657 GGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA -----rrcacrosocorarararacaaccroccaccaccaarccroccacaar <u> ATGGACGGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACGACCAGTCCCTCTTTGAC</u> TGTGCCTACGGATCG---CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT 240 CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG Gaps 33; Length 1359; CANCER APPLICANT: Engelhard, Eric
APPLICANT: Morris, David
TILE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANN
FILE REFERENCE: A-71087/RMS/DCF
CURRENT APPLICATION NUMBER: US/10/052,482
CURRENT APPLICATION NUMBER: US/09/747,377
PRIOR RILING DATE: 2000-12-22
PRIOR PILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-13-02
NUMBER OF SEQ ID NOS: 241
SOFTWARE: Patentin version 3.1
SEQ ID NOS: 09/80 Indels Score 562.2; DB 12; Pred. No. 2.9e-175; 0; Mismatches 428; Query Match
Best Local Similarity 66.4%;
Matches 912; Conservative (TYPE: DNA ORGANISM: Homo sapiens US-10-052-482-198 Н 123 180 121 292 417 477 537 591 S a ò ద

Sequence 197, Application US/10052482

Publication No. US20040072264A1

GENERAL INFORMATION:
APPLICANT: Engelhard, Eric
APPLICANT: Morris, David
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
FILE REFERENCE: A-71087/RMS/DCF
CURRENT APPLICATION NUMBER: US/10/052,482

CURRENT FILING DATE: 2002-08-15
PRIOR PLICATION NUMBER: US 09/747,377
PRIOR PLICATION NUMBER: US 09/747,377

PRIOR FILING DATE: 2001-01-22

PRIOR FILING DATE: 2001-03-02

PRIOR PLING DATE: 2001-03-02

PRIOR APPLICATION NUMBER: US 09/798,586

PRIOR FILING DATE: 2001-03-02

PRIOR PLING DATE: 2001-03-02

PRIOR APPLICATION NUMBER: US 09/798,586

PRIOR PLING DATE: 2001-03-02

PRIOR PLING DATE: 2001-03-02

PRIOR PRIOR APPLICATION NUMBER: US 09/798,586

PRIOR PRIOR APPLICATION NUMBER: US 09/798,586 ; ORGANISM: Homo US-10-052-482-197 RESULT 11 US-10-052-482-197

8 8 8 6 S Gaps 33; Indels Score 562.2; DB 12; Pred. No. 4.9e-175; 0; Mismatches 428; Query Match
Best Local Similarity 66.4%;
Matches 912; Conservative 63

a

ò

Length 2957

1133 1237 1193 1057 1117 GAAGTGGCTTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTC 1073 1177 rarigerrackahrritekerredekekertredecekeekerekeekeekerdedeke 1297 TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC 1253 716 817 877 953 352 299 523 476 536 596 703 959 762 776 833 937 893 997 403 359 416 179 463 AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACCACCTACACTCCTCAGAGAGA GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCCAGAAGCAACGCAAAGAATAACA grciaagaagaccrrcitatigacrciagrciagaagaagagcriggggciataadargaat CC---CACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCCAAAACAGAC 878 reresecreadadarecreecerresassassassas reresaradada and sa reresecreadada and sa recordadas and sa recordada and s 998 CCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTGGAGCTGCTCTCCGACAGCGCCC 1058 AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT TATGCCTACAAATTTGATTTCCACGGAATGGCTCAGGCCCTCCAGCCTCCAGAA dactracedecaceccacadateaaceccececececacacadeacadaateaateaa 300 AATTCACCTGATGACTGCAGCGTGGCAAAAAGGAAAAATGGTTAGCAGTTCAGACAAT ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGAGACCTACGTTATGGAGCACAGACCAT GTACGGCAGTGGCTGGAGTGGAGGAGTATGGTCTTCCAGACGTGGACATCTTG 704 GCCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGGAAAG-----TTCACTGCTGGCCTATATACAACCTCCCACACGACCAATCCTCACGATTGAGT CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGAT TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGT rcadedialded de la lilitica de la lilititat de desercadores de la composicación de la CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCCAAACCAGGTTAATGGGTCAAGG GAGTOTOCOGTOGACTGCAGCGTTAGCAATGCAGCAAGCTGGTGGCGGAGGCGAGGCGAGTCC TIGITCCAGAACATIGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA 717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGT GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG 894 954 1014 1118 1074 1134 1238 1194 597 353 404 360 524 584 537 644 657 763 777 123 233 180 293 240 464 417 477

g

\$ 8 \$

원 상 원

品 公 品 公

07:/0:60

0

8 8 8 8 8

g $\stackrel{>}{\circ}$ g

ें

के व ð 9 % A

8 8 8

8 8 8

703 959 762 716 817 176 877 833

```
1194 TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCC 1253
1298 TCGTCCATGTACAAGTACCCTTCTGACATGCCTTCCTACATGCCTTCCTACCATGCCGACCAG 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1254 CAGAAGATGAACTITGIAGGCCCCAICCCCTGCTITGCCCGTAACCTCAICCAGCTIT 1313
1358 CAGAAGGTGAACTITGICCCCCCAICCAICCAIGCCTGICACTICCICCAGCTIC 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1238 INITERATE TRACTICCACGCATIGCCCAGGTCTGCAGCCACATCCGACCAGG 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1314 TITGCTGCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA-- 1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    878 rcrascercaacaaaagrecteceerragagggggggggaaaaaeggagaaraeagag 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTACGGCAGTGGCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                        644 TITITICAGAACAIGGAIGGCAAGGAACIGICIAAAAIGAACAAGGAGGACTICCICCGC
                                                                                                                                                                                                                                                                                                                    597 CTCACGCCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTCAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                      GGAGCCACATTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----Tréachechedentahahahakerecekededaharenterekedahadan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCAAAGAAGCCCTTCTTATGACTCAGTCAGAAGAGGAGGTTGGGGGGAATAACATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC---CACTCAGTCAAAAGCTACCCAACCCATCATCTTCAACAGGGCCCCAAAACAGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        938 CAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCCGGACCAGCAGTCGCTAGCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1014 GAAGTGGCTCGGCGTTGGGGAAGAAGGAAAAGCAAACCTAACATGACTATGACAAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1178 AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGGGCCAGCGAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1134 TAIGCCTACAAATTTGATTTCACGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1418 TTTGGAGCCGCATCACAATACTGGACCTCCCCCAGGGGGGAATCTACCCCAACCCCAAC
                       ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT
                                                          TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                 1372 -----GGCTGCCAGCTGCTCCTTCCCATCTTGGCACCTACTA 1417
1478 GTCCCCCGCCATCCTAACACCCACGTGCCTTCACACTTAGGCAGCTACTACTA 1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-10-172-118-710
; Sequence 710, Application US/10172118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1074
                                                                                                                                                                        584
                                                                                                                                                                                                                     537
                                                                                                                                                                                                                                                                                                                                                                                                                        657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1058
                                                                                                                      477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                          Ω
                                                                                                              ò
                                                                                                                                                              g
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                            \triangle \trian
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          යි යි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                      1417
                                                                                                                                                                      1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGGGATGAACTATGGAAGGTACATGGAAGAAGGAAGCAT---ATTCCGCCTCCAAATATG 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATTCACCTGATGACTGCAGCGTGGCAAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAAT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 710, Application US/10342887

Sequence 710, Application US/10342887

Publication No. US20040058340A1

GENERAL INFORMATION

APPLICANT: Dai, Hongyue

APPLICANT: Linsley, Peter S.

APPLICANT: Mac, Mac

APPLICANT: Van f Veer, Laura Johanna

APPLICANT: Van de Vijver, Mac J.

APPLICANT: Van de Vijver, Mac J.

APPLICANT: Dernards, Rene

TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients

TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients

TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients

TITLE OF INVENTION: Diagnosis (2/10/342,887)

CURRENT APPLICATION NUMBER: 60/289,918

PRIOR APPLICATION NUMBER: 60/380,710

PRIOR APPLICATION NUMBER: 10/172,118

PRIOR PILING DATE: 2002-06-14

MUMBER OF SEQ ID NOS: 2699

LEMGTH: 2957

TVPE: NNA
63 AIGGCAAGCACTAITAAGGAAGCAITATCAGIGGTGAGTGAAGACCAGICCTIGITIGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233 TCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC
                                                                                                         CAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAATATGGGCAAACATCAAAGATGAGCCGCGCGTTCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                         CAGAAGATGAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 38.9%; Score 562.2; DB 13; Length 2957;
Best Local Similarity 66.4%; Pred. No. 4.9e-175;
Matches 912; Conservative 0; Mismatches 428; Indels 33; Gaps
                                                                                                                                                                                                                                                                          -----GGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                                                                    1478 GTCCCCCGCCATCCTAACACCCACGIGCCTTCACACTTAGGCAGCTACTACTA 1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
CORGANISM: Homo sapiens
US-10-342-887-710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              353
                                                                         1254
                                                                                                                      1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                       1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               464
                       g
                                                                    ò
                                                                                                            D.
                                                                                                                                                        දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            장
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 6 6
                                                                                                                                                                                                                                                       장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

1073

1117

893 997 953 1133

```
APPLICANT: BERTUCCI, FRANCOIS
APPLICANT: BERTUCCI, FRANCOIS
APPLICANT: BERTUCCI, PRANCOIS
APPLICANT: HOULGATTE, REWI
APPLICANT: HOULGATTE, REWI
APPLICANT: HOULGATTE
APPLICANT: VIENS, PATRICE
APPLICANT: VIENS, PATRICE
APPLICANT: FERT, VIENS, PATRICE
APPLICANT: FERT, VIENS, PATRICE
APPLICANT: GENES
TITLE OF INVENTION: USING ARRAYS OF CANDIDATE GENES
TITLE OF INVENTION NUMBER: US/10/007,926A
CURRENT FILING DATE: 2000-12-08
NUMBER OF SEQ ID NOS: 468
SOFTWARE: PATENTIN VOS: 468
SOFTWARE: PATENTIN VOS: 468
SOFTWARE: PATENTIN VOS: 468
SOFTWARE: PATENTIN VOS: 468
TENDRA ARRAYS OF SEQ ID NOS: 468
SOFTWARE: PATENTIN VOS: 468
TENDRA ARRAYS OF SEQ ID NOS: 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1418 TTTGGAGCGATCACATACTGGACCTCCCCCACGGGGGGGATCTACCCCAACCCCAAC 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1298 TCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACATGCCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1118 gaggregocaggocordogocoagocoadacaaacaacaacaacardaarracaacaagorg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1134 TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1194 TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1314 TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1238 TATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGCTCTGCAGCCACACAACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1358 cacaaccidedactificatecetecearecarecareceretearecarecarecere
                                                                                                                                                                            CC---CACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGGGACAGAAGACAGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                        938 chacecccaeccaentccerarcantchearccaeccearcaecaecaecaecaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1058 AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGAGTTCAAAATGACGGACCCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1014 GAAGTGGCTCGGCGTTGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1178 accedecerecerrárracrardaraaaacarraréaceaadecaedaaa
                                                                                                                                                                                                                                                   878 TCTGGCCTCAACAAAAGTCCTCCCCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAG
                                                                                                                                                                                                                                                                                                                             998 CCTGGAAGCGGGCAGATCCAGCTGTGTGTGTTCCTCCTGGAGCTGCTCTCCGACAGCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                954 AACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1254 CAGAAGATGAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT
                               717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGAGATCAGCGTGGACGAGTCACAGCCAT
                                                                                                  818 GTCAAAGAGGCCTTCTTATGACTCAGTCAGAGAGGAGCTTGGGGCAATAACATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1372 -----GGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1478 grececedecharecharachechechechecherhagechachherhanna 1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 295, Application US/10007926A, Publication No. US20030143539A1, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-007-926A-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      894
                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 ATGGCAAGCACTATTAAGGAAGCATTATCAGTGGTGAAGTGAAGACCAGTCCTTGTTTGAG 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGACGGACTATTAAGGAGGCTCTGTCGTGGTGAGCGACGACCAGTCCTCTTTGAC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGGGATGAACTATGGAAGCTACATGGAAGAGAAGCAT---ATTCCGCCTCCAAATATG 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAACCAATGAACGAAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTACGGCAGTGGCTGGAGTGGAGGAGTATGGTCTTCCAGACGTGGACATCTTG 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grandechardechegaeregeccaraaaegaeracaecrrearegaeareaacacarec 643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          644 TTTTTCCAGAACATGGATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCCGC 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eccaccaccreracaacacesaacrecreriererecrerecrerracrereres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cc-----Adreadgerchacgrehadgedegagnargachengahrdartechdd 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAAT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGGTCC 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   464 AACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCCTCCTCCCAACATG 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Accaccaácaágagagagatcarcerecedeagaecedeacagagagagar 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIGITCCAGAACATIGATGGGAAAGAGTIGTGTAAAATGACCAAAGATGACTTCCAGAGA 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcadodracida acide cado con refrece calade con caracidad a consecuencia de cons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTGCCTACGGATCG---CCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATATGGGCCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                    Breast Cancer Patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 562.2; DB 13;
Pred. No. 4.9e-175;
0; Mismatches 428;
                                                                                                                     APPLICANT: Linsley, Peter
APPLICANT: Mao, Mao
APPLICANT: Roberts, Chris
APPLICANT: Roberts, Chris
APPLICANT: Roberts, Chris
APPLICANT: Van (* Ver', Laura
APPLICANT: Van (* Vi)ver, Marc
APPLICANT: Van (* Vi)ver, Marc
APPLICANT: Bernards, Rene
APPLICANT: Bernards, Rene
FILE REFERENCE: 9301-175-999
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 710
LENGTH: 2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
PUBLICATION: HORORMATION:
DATABASA ACCESSION NUMBER: NM 002017
DATABASE ENTRY DATE: 2001-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 66.4%;
Matches 912; Conservative
Publication No. US20030224374A1
                                                              APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter
APPLICANT: Mao, Mao
APPLICANT: Roberts, Chris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-172-118-710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

1237

1073

1013

1117

1057

953

997

937 893

877 833 1253

1357

```
1014
                                                          1118
                                                                                                                                       1178
                                                                                                                                                                              1134
                                                                                                                                                                                                                       1238
                                                                                                                                                                                                                                                                1194
                                                                                                                                                                                                                                                                                                     1298
                                                                                                                                                                                                                                                                                                                                              1254
                                                                                                                                                                                                                                                                                                                                                                                     1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1478
                                                                                                   1074
                                                                                                                                                                                                                                                                                                                                                                                                                              1314
                                                   g
                                                                                                 8 8 8
                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                               음 성
                                                                                                                                                                                                                                                                                                                                     8 8
                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1117
                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      953
                                                                                                                                                                                                                                             ATGGACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACCAGTCCCTCTTTGAC 232
                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                                                                                          352
                                                                                                                                                                                                                                                                                                                                                                                                                                                 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITITICAGAACAIGGAIGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTICCICCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cagrérécegradacracaderraceaaardeadeaacracarecegegegegete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGGGATGAACTATGGAAGCTACATGGAAGAAGAAGCAT - - - ATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTACGGCAGTGGCTGGAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCAATGGCTGGAGTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----tréacrecretarararacreceacacecearecres en constructed de la construction de la constru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCAAAGAAGACCCTTCTTATGACTCAGTCAGAAGAGGAGCTTGGGGCAATAACATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC---CACTCAGTCAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               878 rcrescercaacaaaasrccreccerresassescacaaaacsresaaasaaaaaassas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                   180 GAATATGGGCAAACATCAAAGATGAGCCCGCGGGGTTCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                             CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cc-----adreasesrcaacsrcaasccssacrarsaccacararaacaraaars
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u> accaccaacaagaagagagarcarceceeeagaceceacacreresacacagagear</u>
                                                                                                                                                                                                                                                                                    TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT
                                                                                                                                                                                                                                                                                                                          rcaeceracedaecedeaececarcreceaaeeceaeacareaecreceree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eccaccaccrcraaacacedaagacrerrerrercacrcacraacraccrcadaad-
                                                                                                                                                             Gaps
                                                                                                                                                             33;
                                                                                                                        DB 15; Length 2957
  ; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: friend leukemia virus integration 1 (FLI1)
; OTHER INFORMATION: gene.
US-10-007-926A-295
                                                                                                                                                             Indels
                                                                                                                      Score 562.2; DB 15;
Pred. No. 4.9e-175;
0; Mismatches 428;
                                                                                                                    Query Match
Best Local Similarity 66.4%;
Matches 912; Conservative 0
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1058
                                                                                                                                                                                                      63
                                                                                                                                                                                                                                           173
                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                             233
                                                                                                                                                                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                상 점
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                       상
                                                                                                                                                                                                                                                                                                                                                           $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B & B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $ B $
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                      g
```

1237 1193 1297 1253 1357 1313 1417 1371 1073 CAGAAGGIGAACTITGTCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTC TITGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA--Triregaececarcacaáracrececrecececececea arcraececa acececea en receneración de contra en contra e GAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTC GAGGTGGCCAGGCGGGGGGGGGAAAGCAAGCCCAACATGAATTACGACAGCTG TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCAC TCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCC CAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTT AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC greceecedecharecadecadedectreachertadedadetactacta 1530 RESULT 15 US-09-864-761-18410/c

USEFUL FOR

US-UN-864-761-18410/C

| Sequence 1940, Application US/09864761
| Facent No. USZ00004876341
| GRENZAL INFORMATION |
| APPLICANT: Penn, Sharron G. APPLICANT: Penn, Sharron G. APPLICANT: Penn, Sharron G. APPLICANT: Chen, Wensherg
| TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARAY
| TITLE REPRESSION: AGONGE-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFU |
| TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARAY |
| TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARAY |
| TITLE REPRESSION: AGONGE-A-1 US/09/864,761 |
| CURRENT FAING DATE: 2001-05-23 |
| FRIOR PILITAND DATE: 2000-05-26 |
| FRIOR PILITAND DATE: 2000-05-26 |
| FRIOR FILING DATE: 2000-06-26 |
| FRIOR FILING DATE: 2000-06-36 |
| FRIOR FILING DATE: 2000-06-36 |
| FRIOR FILING DATE: 2001-06-36 |
| FRIOR FILING DATE: 2001-01-30 |
| FRIOR FILING DATE: 2001-01-30 |
| FRIOR PILING DATE: 2001-01-30 |
| FRIOR FILING DATE: 2001-01-30 |
| FRIOR FIL

```
1016 AGTGGCTCGGCGTTGGGGAGAGAAAGCAAACCTAACATGAACTATGACAAACTCAG 1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1076 CCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTA 1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136 TGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACCCTCCAGAATC 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1196 ATCCATGTACAAATACCCATCAGACCTCCCTACATGAGTTCCTACCATGCACACCCCCA 1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1256 GAAGATGAACTITGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTT 1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1316 TGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTACCCCCAATACCAGGCT 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       956 CTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGA 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         223 AICTCIGIACAAGIACCCCTCAGACCICCGTACAIGGGCTCCTAICACGCCCCACCACA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163 GAAGATGAACTITGIGGGGGCCCCACCCTCCAGCCTCCCGGAACATCTTCCAGTTTTT 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     463 CTCCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGA 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   403 GGTGGCCCGGCGCTGGGGGGGGAGAGCGAAACCCAACATGAACTACGATAAGCTCAG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        343 ccececcircerracracratareaeaacareareaeaacareaeaacareaeaacera 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              896 AGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAA 955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           523 AGGCAGTGGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGCTCCAA 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103 TGCTGCCCCAAACCCATACTGGAATTCACCAACTGGGGGGTATATACCCCCAACACTAGGCT 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEXPRESED IN PLACENTA, SIGNAL = 1.4

NEXPRESED IN HELLO, SIGNAL = 1.4

NEXPRESED IN HEART, SIGNAL = 1.7

NEXPRESED IN HEART, SIGNAL = 0.92

NEXPRESED IN HEART, SIGNAL = 0.92

NEXPRESED IN BONE MARROW, SIGNAL = 2.1

NEXPRESED IN LUNG, SIGNAL = 1.5

NEXPRESED IN ADULT LIVER, SIGNAL = 1.5

NEXPRESED IN ADULT LIVER, SIGNAL = 1.5

NEXPRESED IN FETAL LIVER, SIGNAL = 0.95

NEXPRESED IN FETAL LIVER, SIGNAL = 0.95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 567;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1376 GCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAA 1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

26.7%; Score 387; DB 9; Length 56'
Best Local Similarity 83.7%; Pred. No. 2.9e-117;
Matches 438; Conservative 0; Mismatches 85; Indels
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARR: Annomax Sequence Listing Engine vers: 1.1
SEQ ID NO 18410
                                                                                                                                                                                                                                                                                                                                       LENGIAL
TYPE: DNA
ORGANISM: Homo sapiens
FRATURE:
OTHER INFORMATION: MAP T
OTHER INFORMATION: EXPRE
OTHER INFORMATION: EXP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

completed: May 27, 2004, 21:11:29 le : 732 secs

Search con Job time

Title: Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Searched:

Minimum DB Maximum DB

Database

```
AY419455 Pan trogl
BUJ34592 603500995
BUJ34592 603500995
AY418899 Mus muscu
AY418899 Mus muscu
AY418899 Homo sapi
BUJ7855 603471895
AY418891 Homo sapi
BUJ73032 602412867
BUJ73031 601408.9
BUJ73031 601408.9
BUJ73031 60241625
BUJ73031 60350690
BE660034 BE60034
BUJ73031 60350690
BE67034 BE670037
BUJ73031 603869591
BUJ7867 BBF77887
BUJ7867 BUJ78656
BUJ7867 BUJ78656
BUJ7867 BUJ78676
BUJ7867 BUJ7867676
BUJ7867 BUJ7867676
BUJ7867 BUJ7867676
BUJ7867 BUJ7867676
BUJ7867 BUJ7867676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1350 bp DNA linear GSS 17-DEC-2003
Homo sapiens ERG gene, VIRTUAL TRANSCRIPT, partial sequence,
genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (Dases 1 to 1350)
1 (Cates 1 to 1350)
1 Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriacas, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, W. White, T.J., Sninsky, J.J., Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14671302 (hases 1 to 1350) (lases 1 to 1350) (la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene trios
Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                    AU136709
BM211127
BM221127
BM221127
BM3200121
BM3200221
BM3200231
BM3200231
BM3200231
BM3200231
BM3200231
BM32003300
CA400791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AY419454.1 GI:39775411
GSS.
                                                                                                                                                                                                                  55
        921113
1112213
112213
112213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
      Homo sapiens
                                                                                                                                                                                                                      AY419454
      RESULT 1
AY419454
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
         υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AY419454 Homo sapi
AKO50922 Mus muscu
AY419456 Mus muscu
AKO78113 Mus muscu
                                                                                                      May 27, 2004, 16:28:06; Search time 4096 Seconds (without alignments) 10549.457 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                     1 gaatteegegaaegaataat........gaaagaaaagegeeaagaaaa 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                             55026578
                     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                27513289 seqs, 14931090276 residues
                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AY419454
AX050922
AY419456
AX078113
                                                                               nucleic search, using sw model
                                                                                                                                                                                                                                   IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             en_gas_vrt.
en_gas_furt.
en_gas_fur.
en_gas_fur.
en_gas_pros.
en_gas_vrt.
en_gas_vrt.
en_gas_vrt.
en_gas_vrt.
en_gas_vrt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_gss_hum:*
em_gss_inv:*
em_gss_pln:*
                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1: em_estba::
2: em_esthum::
4: em_esthum::
5: em_esthum::
6: em_esthov::
7: em_estpl::
10: gb_estp::
11: gb_estp::
12: gb_estp::
13: gb_estp::
14: gb_estp::
15: em_estfun::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                       US-09-902-772-1
1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em estom:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1350
1866
1350
3064
                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
60
60
60
60
60
60
```

Score

Result Š. 917.2 881.6 879.4 876.4

909	Oy 1089 TACTACTRIGACADAAATATTATTATO Db 1021 TACTACTATGACAGGACATCATCACC Qy 1149 GATTTCCACGGAATCGCTCAGGC Qy 1209 TACCCATCAGACCTCCCAGCACC Qy 1209 TACCCATCAGACCTCCCTACATC Qy 1209 GTAGCTCCCCTCCCTACATCACC Qy 1229 GTAGCTCCCCTCCCTACACTCCC Qy 1329 CATACTGCACTCCCTTCCCTTCC Qy 1329 CATACTGCAATTCACCACTCGC Qy 1329 CATACTGCAATTCACCACTCGG Qy 1329 CATACTGCAATTCACCACTGGG Qy 1329 ATGCCTTCCCCTTGGGCACTTGGG Qy 1389 ATGCCTTCCCCTTGGGCACTTGGG Qy 1389 ATGCCTTCCTCGGGCACTTGGG Qy 13819 ATGCCTTCTCATCTGGGCACTTGGG AKOS0922 LOCUS AKOS0922 AKOS0922 AKOS0922 AKOS0922 AKOS0922 AKOSO922 LOCUS AKOSO922	VERSION AKOSO922.1 G1:26341597 KEYWORDS HTC; CAP trapper. SOURCE ORGANISM Mus musculus (house mouse) Eukaryota, Metazoa; Chorda Mammalia; Eutheria; Rodent REFERENCE Carninci,P. and Hayshizal AUTHORS High-efficiency full-lengt JOURNAL Meth. Enzymol. 303, 19-44 MEDLINE 1034636 REFERENCE Carninci,P., Shibata,Y., F AUTHORS Carninci,P., Shibata,Y., F ITLE Normalization and subtract DOURNAL Genome Res. 10 (10), 1617 MEDLINE 20499374 FUBMED 1042159 REFERENCE 20499374 FUBMED 11042159 REFERENCE 3 AUTHORS Shibata,X., Itch,M., Alzaw Konno,H., Akiyama,J., Nish Sumi,N., Ishii,Y., Nakamul Yamanneto,H., Akiyama,J., Nish Sumi,N., Ishii,Y., Nakamul Yamanneto,R., Tooue,K., Tooue,K., Too
JOURNAL Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA COMMENT These sequences were made by sequencing genomic exons and ordering them based on alignment. FEATURES 1. 1350 / Organism="Homos appiens" / Ab_Xref="taxon:9606" / Gene="ERG" / Jocus_tag="HCM6896" / Jocus_tag="HCM6896"	Query Match 63.4%; Score 917.2; DB 29; Length 1350; Best Local Similarity 79.1%; Pred. No. 3.5e-263; Indels 12; Gaps 2; Matches 1068; Conservative 0; Mismatches 270; Indels 12; Gaps 2; Qy 11 Conservative 0; Mismatches 270; Indels 12; Gaps 2; Qy 14 CACTGGCTTATCAGTGGTGAGTGAGTGAGTCTTTTGAGTGCTGAGGAGTGCC 140 Db 14 CACTGGCTTATCAGTGGTGAGTGAGTGGTCTTTTGAGTGCTGAGAGTTCCAG 0 Oy 20 14 CACTGGCTAGAGAGTGACGGTCTCTCTCTCTCTCAGCGAGTTCCAG 120 Oy 20 ATGAGCCCAGCGCTCCCTCTCTCTCTCTCAGCGAGTTCCAG 120 Oy 20 ATGAGCCCAGCGGTTCCCTCAGCGGAGTTGAGCGCCCCCAGCCAG	OY 501 GTGAAGGAGTATGGTCTTCCAGACGTCTTGTTGTTCTTCAGAACATTGATGGGAAA 560 Db 421 GTGAAGAATAGGCCTTCCAGACGTCTTGTTTTTTCCAGAACATTGATGGGAAG 480 Qy 561 CAGTTGTGTAAAATAGGCCTTCCAGACGTTCTCAGAGGCTATATCGAGGGAAG 480 Oy 621 ATCCTCCTGTCACACACACATCCTCAGAGGCTCACCCCCAGCTACACGCCGAC 540 Db 621 ATCCTCCTGTCACACACACACACCTCAGAGAGAGAGGACCACTTTATT 671 Db 621 ATCCTCCTGTCACACTACCTACCTCAGAGAGAGAGGACCACTTTATT 671 Oy 672 TTCCAAATACATCACTACCTACAGAGAGANNNNNNNNNNN

. Hayatsu,N., Sugahara,Y., Shibata,K., aki,Y., Muramatsu,M. and Hayashizaki,Y. tetion of cap-trapper-selected coNAs to 1 libraries for rapid discovery of new genes 7-1630 (2000) 1268 1200 TGCCGTAACCTCATCCAGCTTTTTGCTGCCCCTAAT 1328 GAGGCAICTACCCCAATACCAGGCTGCTGCTGCTT 1388 1088 1020 1148 1080 CCCTCCAGCTCACCTCCAGAATCATCCATGTACAA 1208 1866 bp mRNA linear HTC 20-SEP-2003 cyo whole body cDNA, RIKEN full-length D030036124 product:Erg mRNA, mouse homolog le ERG, transcript variant 1, full insert zawa,K., Nagaoka,S., Sasaki,N., Carninci,P., ishi,K., Kitsunai,T., Tashiro,H., Itoh,M., nura,S., Hazama,M., Nishine,T., Harada,A., I., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Ogawa,Y., Izawa,M., Ohara,E., Watahiki,M., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., 900 968 data; Craniata; Vertebrata; Euteleostomi; ntia; Sciurognathi; Muridae; Murinae; Mus. TGAGTTCCTACCATGCACCCCAGAAGATGAACTTT TGGAGCTTCTGTCGGACAGCTCCAACTGCATCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTGACTCCAACTCCAGCTGCATCTTCTAC cloning ractactaa 1418 ||||||||| ractactaa 1350 raki, Y. ngth cDNA c 14 (1999)

m

```
1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1060
KYBEDLFYMGSYHAHPQKMNFVSPHPPALFVTSSSFFASPNPYMNSPTGGIYPNTRLP
ASHMPSHLGTYY"
                                                                                                                                  <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             724
                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGTTAGATCCTTACCAGATCCTGGGACCGACCAGTAGCCGCCTTGCTAATCCAGGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614 CGCAGATATCCTCCTGTCACACTACCTCCAGAGAGA------GAGGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rrccgargacgrrgaraggcrrracaaaacrcrccacggrraargccaggaacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           941 agairtraccritargagcerecenagagareageeriggaeeggeekageekeereneeee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521 gigcagrergaacaaadgregaaagaregicaecaeceesaracrergaesareaecra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      761 recearges cretecarates caracares con recases concessors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATC---CCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGTCAAAAGCTACCCAACCATCATCATCAACAGTGCCCAAAACAGAAGACCCAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461 CACCATCAAGATGGAGTGCAACCCTAGTCAGGTGAATGGTTCCAGGAACTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rcadriccaaadcrecrcadccarcrecercrecaedececaaaacreaadaccaecerce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOGGCAGATACAGCTACTACTACTGGAGCTTCTGTCGGACAGCTCCAACTCCAA
                                                                                                                                                                                                                        281 TATTAAGGAGGCCTTGTCAGTTGTGAGCGAGCCAGTCACTATTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                            254 TACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314 CTGCAGCGTGGCAAAAGGAAGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641 Agreancerecrecadarecraerereresedeacacaderereresedesega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       701 gregecegreaagaarareecrecrecarereeacrerracrarreagaarareea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   554 TOGGAAAGAGTIGIGIAAAATGACCAAAGATGACTTCCAGAGACTCACGCCGAGCTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               recesacarretrerereacarerecachacereasasaserecerrecacarereae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITIATITITCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCC
                                                                                                                                                                       74 ȚATTAAGGAAGCATȚATCAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGCCTACGG
                                                                                                                                                                                                                                                                  134 ATCGCCCCCCTGCAAAGACAGAAATGACAGCCTCCTCCTCCAGTGAATATGGGCAAAC
                                                                                                                                                                                                                                                                                                         341 Aaceccacactroscraagacagargacecarccrcrrccagroacraresccasec
                                                                                                                                                                                                                                                                                                                                                                                             AGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGA
                                                                                                                                                                                                                                                                                                                                                      194 ATCAAAGATGAGCCCGCGCGTTCCCCAGCAGGACTGGTTATCACAGCCCCGGCCAAGA
                                                                                                                                  Gaps
                                                                                                                                  12;
                                                                                        Length, 1866;
                                                                                      Score 881.6; DB 11; Length
Pred. No. 2e-252;
0; Mismatches 269; Indels
                                                                                        Query Match
Best Local Similarity 79.3%;
Matches 1075; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            962
                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Бb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                              ò
                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-722 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (B-mail:genome-res@gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
/protein_id="BAC34461.1"
/db_xref="G1:M5341598"
/translation="M1QTVPDPAAHIXEALSVVSEDQSLFECAYGTPHLAKTEMTASS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSDYGCTSKNSPRYPQQDWLSQAPARYTIKMECNPSQYNGSRNSPDECSVNKGGKMVG
SPDTVGMSYGSYMEEKHVPPPNMTTNBRRVIVPADPTLMSTDHVRQWLEWAYKEYGLL
DVDVLLFQNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLKETPLHLTSDPUDKA
LQNSPRLMHARNTDLPYEPRSAMTHGSHLTPQSKAQPSPSAVPKTEDGRPQLDFY
QILGPTSSKLANPGGGOLQLMQFLELLSDSSNSNSNTWEGTNGEFKMTDPDEYARRW
GERKSKPNMYDKLSRALRYYYDKNIMTKVHGKRYAYKPDFHGIAQALQPPPESSLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                           Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, M., Fukuda, S., Furuno, M., Hanagaki, T., Haraoka, T., Hirzaoka, T., Hirzaoka, T., Hirzaoka, T., Hirzaoka, T., Hirzaoka, T., Hirzaoka, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakamıra, M., Mishi, K., Mistayaki, A., Mirzata, M., Okazaki, Y., Saito, R., Saitoh, H., Sakai, K., Sakazume, N., Okazaki, Y., Sasaki, D., Shibata, K., Shinagawa, A., Shirzaki, T., Sagabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Kahira, S., Muramatsu, M., and Hayashizaki, Y., Toya, T., Yasunishi, A., Yasunishi, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mouse cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                       Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length cDNAs
                                                                                                                                                           the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="unnamed protein product; Erg mRNA, mouse homolog Human ets-related gene ERG, transcript variant 1 (DBJ|AB073078, evidence: BLASIN, 99%, match=1768)
                                                                                                                                                                                                                                                                  FANTOM Consortium and the RIKEN Genome Exploration Research
Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKEN integrated sequence analysis (RIGA) system--384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                           The RIKEN Genome Exploration Research Group Phase II Team and
                                                                                                                                                                            FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       visit our web site for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol type="mRNA"
/strain="C57BL/60"
/db_xref="FANTOM_DB:D030036124"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue type="whole body"
clone lib="RIKEN full-length
dev stage="9 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:10090"
/clone="D030036124"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'db_xref="MGI:2418825"
                                                                                                                                                                                                                          (2001)
                                                                                                                                                                                                                                                                                                                                                        (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prepare mouse tissues.
                                                                                                                                                                                                                                                                                                                                                        Nature 420, 563-573
6 (bases 1 to 1866)
                                                                                                                                                                                                                        Nature 409, 685-690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fax:81-45-503-9216)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                               11076861
                                                                                                                                                                                                                                                                    The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                           PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                     JOURNAL
                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                              TITLE
                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

ò

à

```
/dev stage="adult"
for stage="adult"
for stage="adult"
for stage="adult"
for stage="adult"
fore="unnamed protein product; Erg mRNA, mouse homolog of
fluan ets-related gene ERG, transcript variant 1
(DBJ|AB073078, evidence: BLASIN, 99%, match=1768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ONIDGKEQCKWTKDDFQRLIPSYNADILLSHLHYLRETPLPHLTSDDVDKALQNSPRL
MHARNTGGAAFI FUNTSYYPEATORI TTRBAAQPSBSAVFKTEDQRFQLDPYQILGFT
SSRLANDRGSGQI QLWQFLLELLSDSSNOKI OT THREGTNGEFKWTDFDEVARNGERKSK
SSRLANDRGSKLSRALRYYVDKNI MTKYHGKRYAYKFDFHGIAQALQPHPPESSLYKYFSPSD
PYMGSYHAHPQKWNFVSPHPPALPVTSSSFPASPNPYWNSPTGCI YPNTRLPASHMPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /protein_id="BAC37131.1"
/db_xref="G1:26346965"
/db_xref="G1:26346965"
/xranslat_ion="MASTIREALSVVSEDQSLFECAYGTPHLAKTEMTASSSSDYGQT
/xrsnsprvpQpMLSQAPARYTIKECHSPSQYNGSRNSPDECSYNKGGKNVGSPDTVGM
SYGSPYMEEKHVPPPNMTTNERRVIVPADPTLMSTDHVRQWLEWAVKEYGLLDVDVLLF
                                                                                                                                                                                                                                                                                                                                                                      Submitted (16-APR-2002) Yoshinide Hayashizaki, The Institute of Physical and Chemical Research (RIKER), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Sangawa 230-0045, Japan (E-mail:genome-resegec.riken.go.jp, URL:http://genome-gsc.riken.go.jp/, Tel:81-85-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="medulla oblongata"
/clone_lib="RIKEN full-length enriched mouse cDNA library"
Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Pukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayatsu, M., Hiramoto, K., Haroka, T., Harozane, T., Hori, F., Imotani, K., Indrami, K., Indrami, K., Indrami, K., Indrami, K., Indrami, T., Koula, T., Kauda, M., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Konda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Sailoo, R., Sailoo, R., Sailoo, R., Sailoo, R., Sakai, C., Sakai, K., Sakazume, N., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Muramatsu, M. and Hayashizaki, Y., Yasunishi, R., Yasunishi, A., Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 AAGCACTAITAAGGAAGCATTAICAGTGGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGC 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66 cadcactartraaddagdccrigicadtrordagddagddagtcadtringagtgigd 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128 CTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 GCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACATTATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6 GAGAAGCAATAATTATTAACATTTATTAACGATCAATAAACTTGATTAGCATTATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 876.4; DB 11; Length 3064; Pred. No. 9.1e-251; 0; Mismatches 306; Indels 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prepare mouse tissues.
Please visit our web site for further details.
URL:http://gancome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="FANTOM_DB:6330501C04"
/db_xref="MG1:395312"
/db_xref="taxon:10090"
/clone="6330501C04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .3064
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60.6%;
77.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 77.1
Matches 1101; Conservative
                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itch,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                   1200
      AK078113
3064 bp mRNA linear HTC 18-SEP-2003
Was musculus adult male medulla oblongate orDNA, RIKBN full-length
enriched library, clone:6330501C04 product:Brg mRNA, mouse homolog
of Human ets-related gene ERG, transcript variant 1, full insert
                                                                                                                                                                                                            GCTGCCCTAAT 1328
                                                                                                                                                                                                                                                               1201 digrerecedececederecedadesenenterecederireriadenecedade 1260
                                                                                                                                                                                                                                                                                                                         CCATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCAGGCTGCCAGCTGCTCAT 1388
                                                                                                                                                                                                                                                                                                                                                             Shibata,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A., Yamamoto,R., Matsumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Pujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,B., Matahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,X., Tanaka,T., Matsunra,S., Kawai,J., Norazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKEN integrated sequence analysis (RISA) system--384-format Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,770 tull-length cDNAs
Nature 420, 563-573 (2002)
6 (bases 1 to 3064)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                             TACCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCCAGAAGATGAACTTT
                                                                                                                                                1141 TACCCCTCCGACCTGCCATACATGGGCTCCTATCACGCCCACCCCAGGAAGATGAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carninci, P. and Hayashizaki, Y.
High efficiency full-length cDNA cloning
Weth. Enzymol. 303, 19-44 (1999)
99279233
                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGCCTTCCCATCTTGGCACCTACTACTA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCCCTCTCACCTGGGCACCTACTA 1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AKÖ78113
AKO78113.1 GI:26346964
HTC; CAP trapper.
Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .0349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11076861
                                                                                                                                                                                                                                                                                                                         1329
                                                                                                                                                                                                                                                                                                                                                                                                                                     1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                             1209
                                                                                                                                                                                                         1269
                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
AK078113
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                          à
                                                                                                                                       g
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

Db 1261 CCATACTGGAATTCACCAACTGGGGGTATATACCCCAATAC	Oy 1389 ATGCTTCCCATCTTGGCACCTACTACTA 1418	BU334592 726 bp mRNA	N 603500995F1 CSEQCEN65 Gallus sequence. BU334592.1 GI:25842593	KEYWORDS EST. SOURCE Gallus gallus (chicken) ORGANISM Gallus gallus Eukaryota; Metazoa; Chordata; Craniata; Ver	Archosauria; Aves; Neognathae; Galliformes; Phasianinne; Gallus. REFERENCE I (bases 1 to 726) AUTHORS Boardman, P.E., Sana-Ezquerro, J., Overton, I.!	TITLE A Comprehensive Collection of Chicken cDNA JOURNAL Curr. Biol. 12 (22), 1965-1969 (2002) MEDLINE 22335534 TITLE ATTACKS TO THE STATE OF T	COMMENT CONTRACT: Simon Hubbard COMMENT Department of Biomolecular Sciences University of Manchester Institute of Science	Tel: 01612008930 Fax: 01612366499 Fax: 01612366499	FEATURES Location/Qualifiers 1. 726 / Organism="Gallus gallus" / // // // // // // // // // // // //	/ strain="White Leghorn, Hisex" / db_xref="taxon:9031" / clone="chEST4!sm23" / figure tyne="chtole embryo"	/ Listue	/noce="Organ: wnole embryo; vect Site_1: EcoR!; Site_2: Not1; Constructed from 1 million indept synthesis was initiated using an	Mentylated in the rise Berand s Following this first strand reactif was blunted, ligated to NotI adapt. BCORI, size-selected, and cloned in	Comparize sizes or a custom mours pBluescript (XS+) vector. The librir rounds using conditions adapted from 1941 91: 9228-9232 and Bonaldo et (1941) 91: 9228-9232 and Bonaldo et (1964)		Query Match Query Match Best Local Similarity 99.6%; Pred. No. 7.1e-196; Matches 715; Conservative 0; Mismatches 1;	Qy 706 AAAGAATAACAACAACAGGCCAGATTTACCTTATGAGCAAGCG	Oy 766 GTCACAGCCACTCAGTCAAAAGCTACCCAACCATCATCATCATCATCATCATCATCATCATC
	321 GTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTATGGAAGC 380 	TACATGGAGGAAGGATATTCCGCCTCCAAATATGACAACCAATGAAGGAAG	441 GTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGGAGTGGGCA 500 361 NANNANNANNANNANNANANGGATAGACAACTGCGGCAGTGNATGGAGTGGAG	gtgaaggagtatggtcttccagacgtggacatcttgttgttccagaacattgatgggaa 	GAGTIGIGIAAATGACCAAAGAIGACTICCAGAGACTCACGCCGAGCTATAACGCAGAT 	621 ATCCTCCTGTCACACCTACACTCAGAGAGAGAGGAGCCACTTTATT 671	672 TITCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGAGGCCAGATTTA 731 	732 CCTTATGAGGAGGAGGAGGAGGAGGGGGGGGGGGCATCCCACTCAGTCA 788	789 AAAGCIACCCAACCAICAICTTCAACAGTGCCCAAAACAGAAGACCAGCGTCCTCAGTTA 848 	849 GATCCTTATCAGATTCTTGGACCGACCAGCCGTCTTGCAAATCCAGGAGATGGGCAG 908 	909 ATACAGCTATGGCAGTTCCTACTGGAGCTTCTGGGAGCTCCAACTCCAACTGCATC 968	969 ACCTGGGAGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGAGGCGTCGGCGT 1028 	1029 TGGGGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCGGGCACTTCGC 1088 	1089 TACTACTATGACAAAAATATTATGACTAAAGGTTCATGGTAAAGGCTATGCCTACAAATTT 1148 1021 TACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGGGTACGCCTACAAGTTC 1080	1149 GATITCCACGGAATCGCTCAGCCCTCCAGCCTCCAGAATCATCCATGTACAAA 1208 1081 GACTTCCACGGAATCGCCCAGGCCTCCAGCCCCACCCCCGGAGTCATCTCTGTACAAG 1140	1209 TACCCATCAGACCTCCCCTACCATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTT 1268 1141 TACCCCTCAGACCTCCCGTACATGAGCCCCTATCAGACCCCACCCCAAAAAATGAACTTT 1200	1269 GTAGCTCCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCCCTAAT 1328	
d d	8 8	8 & 8	۶۵ م	oy O	Qy Db	දු දු	& 원	S S	S S	상 음 -	oy do	9 Q	& 92 24	\$ 6 6	දු පු	\$ 6	8 6	g &

```
his normalized library was spendent clones. cDNA spendent clones. cDNA and oligo dTJ primer, using action, double stranded cDNA apperers, digested with apperers, digested with alapters, digested with alapters, digested with action the Norl and BcoRI oliforary was normalized in 2 library was normalized in 2 if from Soares et al., pNAS ilo et al., Genome Research 6 life antly longer
                                                                                                                                                                                                                                                                                                                                                         I.M., Burt,D.W., Bosch,E.,
n,S.A. and Hubbard,S.J.
es
ACTAGGCTCCCCACCAGCCAT 1320
                                                                                                                                                      linear EST 28-NOV-2002
clone ChEST418m23 5', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGGAGATCAGCGTGGACGA 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ertebrata; Buteleostomi;
3; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ence and Technology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 726;
```

g

ਨੇ

g

 δ 6 8

 δ

g ò g ò g 8 g ò g ò d ð

```
Stadeni, J., Aizawa, K., Akimura, T., Arakewa, T., Bono, H., Carninci, P., Pukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Fukuda, S., Furuno, M., Hanagaki, T., Hiraokar, T., Hirzozane, T., Hayashida, K., Hayashida, K., Hayashida, K., Hayashida, K., Hayashida, T., Hirzozane, T., Hayashida, K., Ishidi, Y., Itoh, M., Kagawa, I., Kasukawa, T., Katoh, H., Kawai, J., Kojimai, Y., Kondo, S., Konno, H., Kowa, T., Kawai, Y., Kojimai, Y., Kondo, S., Konno, H., Kowa, T., Maraki, T., Kayazaki, A., Murata, M., Ohbato, N., Okazaki, Y., Saitoh, H., Sakai, C., Sakai, K., Ohno, M., Ohsato, N., Okazaki, Y., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sano, H., Sakazi, D., Shibata, K., Shibata, K., Shibata, K., Shiraki, T., Takeda, Y., Tanaka, T., Tomaru, A., Takahashi, F., Takaku-Akahira, S., Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Direct Submission and Hayashizaki, Y. Direct Submission and Hayashizaki, Y. Direct Submission Ghemical Research (RREN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GCC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (B-mail:genome-reseggs. riken.go.jp, RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Hiken Yawa prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Exploration Research Group Division of Experimental Animal Research in Riken contributed to Divisions fersyles were provided by Dr. John Todd (Dept. of Medical Genetics Mellome Trust/MRC building Addenbrookes Hospital Cambridge) whose assistance we gratefully acknowledge:

Please visit our web site for further details.

Incentual Control Control Goods assistance we gratefully acknowledge:

Please visit our web site for further details.

Location/Qualifiers

Location/Qualifiers

Location/Qualifiers
Yamamoto,R., Mateumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKBN integrated sequence analysis (RISA) system--384-format Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA library'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Nature 420, 563-573 (2002)

( Dases I to 1706)
                                                                                                                                                                                                                                                                                                                 The RIKEN Genome Exploration Research Group Phase II Team and the FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection
Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="unnamed protein product; Friend leukemia
integration 1 (MGD|MGI:95554, GB|NM_008026, evidence:
BLASIN, 99%, match=1671)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / b. xref="FANTOW DB.A630059111"

/db_xref="MGI:2407136"

/db_xref="MGI:2407136"

/db_xref="taxon:10090"

/db_xref="taxon:10090"

/dlone="A530059111"

/tissue_bype="thymus"

/clone lib="RIKEN full-length enriched mouse

/dev_stage="3 days neonate"

/dev_stage="3 days neonate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. 1706
/organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         codon_start=1
/protein_id="BAC31169.1"
/db_xref="G1:26334937"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            putative"
                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus 3 days neonate thymus cDNA, RIKEN full-length enriched library, clone:A630059111 product:Friend leukemia integration 1, full insert sequence.
AK042111.1 G1:26334936
HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shibata,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P.,
Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M.,
Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A.,
                                                                                                                                                                                                                                                                                                 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACT-GGAGGCATCTACCCC 1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 genea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAAACTCAGCCGTGCACTTCGCTACTACTATGACAAAAATATTATGACTAAAGTTCATG 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACC 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CICCAGAAICAICCAIGTACAAAIACCCAICAGACCICCCCIACAIGAGIIGCTACCAIG 1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACACCCCCAGAAGAIGAACTITIGIAGCICCCCATCCCCCTGCTTIGCCCGTAACCICAT 1305
                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATG 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGAAGAAAAGCAAACCTAACATGAACTATG 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTAAACGCTATGCCTACAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACC 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATG 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACACCCCCAGAAGAIGAACTIIGIAGCICCCCAICCCCCTGCTIIGCCGIAACCTCAT 608
                                                                                                                                                                            945
                                                                                                                                                                                                                                                                                                                                 249 ACAGCTCCAACTCCAACTGCATCACCTGGGAGGCACAAATGGGGGAGTTCAAGATGAACAG 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     369 ACABACTCAGCCGTGCACTTCGCTACTACTATGACABABATATTATGACTABAGTTCATG 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             609 ccaectrititgciececeranecaracidaanicaeaaciegeadecarciaece 668
                                                       885
                                                                                                                                                                                                                                   TIGCAAAICCAGGGAGIGGGCAGAIACAGCIAIGGCAGIICCIACIGGAGCIICIGIGG 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (house mouse)
Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1365 AATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATC-TTGGCACCTACTAAGTG 1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              669 AATACCAGGCTGCCAGCTGCTGCTATGCCTTCCCATCTTTGGCACCTACTAAGTG 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length oDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                 TIGCAAAICCAGGGAGIGGGCAGAIACAGCIAIGGCAGTICCIACIGGAGCTICIGICGG
                                                                                                                                                                                                                                                                                                 ACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGGAGTTCAAGATGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99270253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20499374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .0349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                                                                      1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1306
                                                    826
                                                                                                                 129
                                                                                                                                                                            886
                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
AK042111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
```

JOURNAL TITLE

D

8 6 8 6

8 8 8

/translation="MDGTIKEALSVVSDDQSLFDSAYGAAAHLPKADMTASGSPDYGQ
PHKINPLPPQQDEMINDPVRNAYKREYDHMUGSRESPYDCSVSKCNKLVGGGBANPMNY
SYMDEKOGPPPPNMTTNERNYVPDPDTLMYGHHVROWLEMAIKEYGLMEIDTSFYG
NMOGYBELKOKOKKEDPELATSAYNTSVILSHLSYLESSLLAYNTTSHTDQSSRLAVE
DPSYDSVRRGAMNNNMNSGLNKSPLLGGSQTMCKNTEQRPQPDPYQILGPTSSRLAVE
GSGQIQLMQFLLELLSDSANASCITMEGTNGBFKMTDPDEVARRWGFKKSKPNMYYDK
LSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPTETSMYKYPSDISYMPSYH
ALQQKVNFVPSHPSSMPVTSSSFFGAASQYMTSPTAGIYPNFSVPRPSHTGS
YY" ý 833 122 239 299 388 508 476 536 628 596 688 656 747 716 802 773 862 982 953 217 179 277 337 359 448 416 568 CCTTGTTTGAG CCCCCGGCCAGAGITACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG cc------Adrigagagrczargrczagogagagrargaccacargargargarccago 300 AATTCACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAATGGTTAGCAGTTCAGACAAT aaccccandaacraraaradcracardadaadaadaacgccccccrccrccaacard ACAACCAATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCAT GTACGGCAGTGGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG trctrccagaacategarggcaaggaatrgrgraaaargaacaaggagactrcccga CTCACGCCGAGCTATAACGCAGATATCCTCTCTCACACCTACACTCACAGAGAGA GGAGCCACTTTTTTTTTTCCAAATACATCAGTTTACCCAGAAGCAAGGAATAACA ----TTCACTGCTGCCTATAACACACCTCCCATACAGACCAGTCCTCACGACTGAAT grcaadgaadaccerrcirardacrerdreaddagagdacarddaacaaraarargaac CATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAACAGAAGAC GAGTCTCCGGTGGACTGCAGTGTCAGCAAATGTAACAAGCTGGTGGGCGGAGGCGAAGCC GITGGGATGAACTATGGAAGCTACATGGAAGAGAAGAAGA---TATTCCGCCTCCAAATATG TTGTTCCAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGA ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGTTCAGCGTGGACGCGAGTCACA---GC GAATATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAG GCCACCTCCGCCTACAACACAGAAGTGCTGTTGTCGCACCTCAGTTACCTCAGGGAAAG-TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGT tcadcatacadadadadadadacaadacaadaadadaaatatadacadatatadaadaadaada Gaps 33; Score 570.2; DB 11; Length Pred. No. 5e-159; 0; Mismatches 423; Indels 39.4%; Conservative Best Local Similarity Matches 917; Conserv 717 240 863 923 158 123 218 180 278 338 360 449 417 509 477 569 537 629 597 689 657 748 803 774 834 894 Query Match DRIGIN g d \$ B \$

음 상 음

8 8 8

950 GGGGAGAGAGCGCAACATGAATTATGACAAGCTGAGCCGGGCCCTCCGAT 1009 1090 ACTACTATGACAAAAATATTATGACTAAAGTTATGGCTAAGCCTACGCAACATTG 1149 1010 ACTACTATGACAAAAATATTATGACTAAAGTTCATGGCTAACAGTTTG 1149 1010 ACTACTATGACAAAAAATATTATGACCAAAAGGTAGCCTACAAGTTTG 1069 1150 ATTCCAAGAAAAAAAAAAGGTAACAAAAAAAAAAAAAAA	AK036655 AK036655 AK036655 AK036655 TON Mus musculus adult male bone cDNA, RIKEN full-length enriched library, clone:9830146N17 product:Friend leukemia integration 1, full insert sequence. AK13655 AK036655.1 GI:26331575 S HTG; CAP trapper. Mus musculus (house mouse) S HTG; CAP trapper. Mus musculus (house mouse) S HTG; CAP trapper. Mus musculus (house mouse) TSM Musculus (hous		Korno, H., Akryama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishi, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoco, R., Mateumoto, R., Sakaguchi, S., Ikegami, T., Kashiwadi, K., Fujiwake, S., Imoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tamaka, T., Matuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer. NE 20530913 CE 4 The RIKEN Genome Exploration Research Group Phase II Team and the FAMATOM Conscitium. Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
8 6 8 6 8 6 8 6 8 6 8	RESULT 9 AX036655 LOCUS DEFINITION ACCESSION VERSION VERYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL PETAMENT	REFERENCE AUTHORS TITLE OURNAL MEDLINE PUBMED REFERENCE AUTHORS	TITLE JOURNAL MEDLINE PUBMED REFERENCE AUTHORS TITLE JOURNAL REFERENCE
	376 296 3356 493 476 613	536 ACACAGAAGIGGIGTIGTIGGCACCICACITACCICAGGAAAA	GCCAG 76 GCCAG 76 GCCAG 80 GCCAG 82 GCCAG 82 GCCAG 82 GCCAG 82 GCGCT 94 GCGCT 94

```
GAAGTGGCTCGGCGTTGGGGAGGAAAAGCAAACCTAACATGAACTATGACAAACTC 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCGTGCACTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1194 AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAGTGCATGGCAAAAGG 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1134 TATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACACAA 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rareccracaaertreacrrecareccarreccaaeaccreecaeccacarecaaeae 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCGGCCCAGCCAGATCCTTATCAGATCCTGGGGCCAACCAGCAGCCGCCTAGCAAC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        894 renegecercaacaaaagreereerresaagaarieacaaaecariggecaagaacaergag 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccreegaactecagarccagcreregcagtrcccreeaactactecaacagccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312 GACTACGGGCAGCCCCACAAATCAACCCCTGCCACCGCAGCAGGAGTGGATCAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300 ANTICACCTGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccccarigaacraraaraacracargaargaagaacgacccccccrccrccaacarg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTACGGCAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600 gircdacadridderiddadriddderaraaaddaaracdarirgarddadarridaCacricc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          657 GGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----Tréacriscrissionara de la consecue de la consec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       717 ACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCTGAT
                                                                                                                                                                                                                                                                                                                                             240 CCCCCGGCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                   CC-----AGTGAGAGTCAATGTCAAGCGGGAGTATGACCACATGAATGGATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417 ACAACCAATGAACGAAGAGTTATTGTGCCAGGAGATCCTACGTTATGGAGCACAGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660 ricriccadaacarddarddcaagdarricroraaaaaaaaadaagagdacrrccaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720 eccaccriceccracaacacacaarecrerriercecaccreariaccreaseaaaa-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCACTCAGTCAAAAGCTACCCAACCATCATCA---ACAGTGCCCAAAACAGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCC
                                                                                                           252 TCAGCATACGGAGCGGCAGCCCATCTCCCCAAGGCAGATATGACTGCTTCGGGGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360 GITGGGATGAACTATGGAAGCTACATGGAAGAAGCA---TATTCCGCCTCCAAATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGTTCCAGAACATTGAAGAGAAAGAGTTGTGAAAAATGACCAAAAGATGACTTCCAGAGA
                                TGTGCCTACGGATCG----CCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCCAGT
                                                                                                                                                                                     GAATATGGGCAAACATCAAAGATGAGCCCGGCGCGTTCCCCAGCAGGACTGGTTATCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1014
                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                   372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        954
                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे हे ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                          a
                                                                                                                                                                                         5 6
                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                        Group Phase I & II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,710 full-length cDNAs

Nature 420, 563-573 (2002)

B ( (bases 1 to 3118)

6 (bases 1 to 318)

7 Adachi, J., Alzawa, K., Akimura, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Kasukawa, T., Katch, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kowai, J., Kojima, Y., Kondo, S., Konno, H., Kowai, M., Nishi, K., Nomura, M., Nurata, M., Ohno, M., Okazaki, Y., Saito, R., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, R., Sakai, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /translation="MOGTIKEALSVVSDDQSLFDSAYGAAAHIPKADWTASGSPDYGQ
PHKINDPLPPQQWILWOPYRVNVKREYDHMGSRESPVDCSVKGNKLVGGGBANPMYN
SYMDEGGOPPPPNMTTNERRYIVPADPTLWTOBHVRGWILEWAIKEYGLMEIDTSFFQN
MDGKELCKWNKEDFLRASNYTEVLLSHLSYIRRESSLLAYNYTSHTDQSSRLNVKED
PSYDSYRRGAMNNMONSGLINKEPLLGGSQTMGXNTBQRPQPPYQILGPTSSFLANPG
SQQIQLWQPLLELLSDSANASCITWEGTNGEFKWTDPDEVARRGERKSKFNNMYDKL
SRALRYYYDKNIMTKVHGKRYAXKFDFHGIAQALQPHPTETSNYKYPBDISYMRSYHA
HQQKVNFVPSHPSSMPVTSSSFFGAASQYWTSPTAGIYPNPSVPRHFNTHVPSHLGSY
Y"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (16-UUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp, URL.http://genome-gsc.riken.go.jp, Tel:81-8503-9222, Fax:81-45-503-9216)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissue type="bone"
/clone_lib="RIKEN full-length enriched mouse cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251
FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u> aregaceseacharhaaceacercrercrercrercancaaceacarcacrerrranam</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="unnamed protein product; Friend leukemia
integration 1 (MGD|MG1:95554, GB|NM_008026, evidence:
BLASTN, 99%, match=1671)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 3118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prepare mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
38.6%; Score 559; DB 11;
Best Local Similarity 66.8%; Pred. No. 1.5e-155;
Matches 917; Conservative 0; Mismatches 420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="FANTOM_DB:9930146N17"
/db_xref="MG1:4361092"
/db_xref="Haxon:10090"
/db_cref="19930146N17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/proteIn_id="BAC29518.1"
/db_xref="G1:26331576"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . .3118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                         REFERENCE
AUTHORS
AUTHORS
                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PEATURES
                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

359

422

371

539

778

1073

à

256 CCATTAAGATGGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGACT 315 176 GGGTCAACGTCAAGCGGGAGTATGACCATGAATGGATCCAGGGAGTCTCCGGTGGACT 235 316 GCAGCGTGGCAAAAGGGGGAAATGGTTAGACATCTCAGACAATGTTGGGATGAACTATG 375 236 GCAGCGTTAAGAAGAGAAATGGTTAGAGTTCAGACAATGTTGGGATGAACTATG 375 376 GAAGCTACATGGAAAGAGCAAGTTGGTGGGGGGAAGGCAATGAACTACA 295 376 GAAGCTACATGGAAGAAGAACCATCCGCCTCCCAAATATGACAATGAACTACA 295 296 ACAGCTTATGGAAGAAAAGAGCCCCCCTCCCCAACTATGACCAACGAAGAGAA 355 433 GAGTTATTGTAGAAGAAATCGTACAGTTATGGAACAATGTAAGGCTGG 492 411	493 416 553 476 613 673 673 670 770 910 910 910 910 910 1030 1030 1030 103
8 4 8 4 8 4 8	B
1194 TCATCCATGTACAAATACCCATCAGACCTCCCTACATGAGTTCCTACCATGCACACCCC 1253	NATIONS WATERSA WAT

```
AX418894 1256 bp DNA linear GSS.17-DEC-2003
Pan troglodytes FLI1 gene, VIRTUAL TRANSCRIPT, partial sequence,
genomic survey sequence.
AX418894.1 GI:39774854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Tu, F., Murphy, B., Tananbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Mann, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Direct Submission Submission Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA These sequences were made by sequencing genomic exons and ordering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryotan, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Pan. 1 (bases 1 to 1256).
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Reriaera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, New Indepring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                        946 ACAGCTCCAACTCCAACTGCATCACCTGGGAGGGCACAAATGGGGAGTTCAAGATGACAG
                                                                                                                                                                                                                                                                                                                                                                    1006 ACCCTGATGAAGTGGCTCGGCGTTGGGGAGAGGAAAAGCAAACCTAACATGAACTATG
                                                                                                                                                                                                                                                                                                                                                                                                290 ACCCTGATGAAGTGGCCTCGGCGTTGGGGAGGAAGAAAAGCCAACCTAACATGGACTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230 ACAAACTCAGCCGTGCACTTCGCTACTACTATGACCAAAATATTATGACTAAAGTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            110 CTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACACATGAGTTCCTACCATG
                                              TTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGG
                                                                                                                                                                                                                                       410 Triccharicchededadreecherhichecrariedecherricchachedagerrereres
                                                                                                                                                                                                                                                                                                                      350 ACAGCTCCAACTCCAACTGCATCACCTGGGAGGCCACAAATGGGGAGTTCAAGATGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170 GTAAACGCTATCCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCACC
                       TCACAGCCATCCCACTCAGTCAAA-AGCTACCCAACCATCATCTTCAACAGTGCCCAAAA
                                                                                                          1066 ACAAACTCAGCCGTGCACTTCGCTACTATATGACAAAAATATTATGACTAAAGTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Pan troglodytes"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           them based on alignment.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACACCCCCAGAAGATGAA 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14671302
                       767
                                                                                                            826
                                                                                                                                                                                                886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Locus
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
AY418894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                            g
                                                                                                          ò
                                                                                                                                             d
                                                                                                                                                                                             à
                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev_intages adult"
//lab_host="adult"
//lab_host="DAIDB"
//clone lib="CSRQRBN22"
//note="Vector: pBluescript II KS(+); Site 1: EcoRI;
Site 2: Not1; This normalized library was constructed from 1 million independent clones. CDNA synthesis was initiated using an oligo(dr) primer, using methylated C in the first strand synthesis reaction. Following this first strand reaction, double-stranded cDNA was blunted, ligated to Not1 adapters, digested with ECORI, size-selected, and cloned into the Not1 and ECORI compatible sites of a custom modified MCS of the pBluescript (XS) vector. The library was normalized in 2 rounds using conditions adapted from Soares et al., PNAS (1994) 91: 9228-9232 and Bonaldo et al., Genome Research 6 (1996): 791, except that a significantly longer reannealing hybridization was
                         1250 AATACTGGACCTCCCCCACGGGGGGAATCTACCCCCAACCCCAACGTCCCCGGCCATCCTA 1309
                                                                                                                                                                                                                                         BU478556 606 bp mRNA linear EST 30-NOV-2002
603471895F1 CSEQRBN22 Gallus gallus cDNA clone ChEST349m24 5', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases I to 606)
Boardman, P.B., Sanz-Ezquerro, J., Overton, I.M., Burt, D.W., Bosch, E., Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A. and Hubbard, S.J. A Comprehensive Collection of Chicken cDNAs (Curr. Biol. 12 (22), 1965-1969 (2002)
  GGCTGCCAG 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     531
                                                                                                                                                                                                                                                                                                                                                                  Gallus gallus (chicken)
Gallus gallus
Bukaryora; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Gallus gallus"
/mol_type="mRNA"
/srain="Layer and broiler"
/db.xref="taxon:9031"
/clone="ChasT349m24"
/sex="Male and female"
/tissue_type="Chondrocytes isolated from growth plate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGATTACCACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGGAATCAGCGTGGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Department of Biomolecular Sciences
University of Manchester Institute of Science and Technology
(UMIST)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 526.2; DB 13; Length 606; Pred. No. 4.8e-146; O; Mismatches 13; Indels 1;
CATACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA---
                                                                                                                 ACACCACGTGCCTTCACACTTAGGCAGCTACTACTA 1346
                                                                                     1381 CTGCTCATATGCCTTCCCATCTTGGCACCTACTACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PO Box 88, Manchester, M60 1QD, UK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: Simon. Hubbard@umist.ac.uk.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                               GI:25972133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Simon Hubbard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36.4%;
llarity 97.5%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 01612008930
Fax: 01612360409
                                                                                                                                                                                                                                                                                                                             BU478556.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                        seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12445392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Sim
Matches 545;
1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Matt...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match
                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                RESULT 11
BU478556/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                              Db
                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
C
```

1185

1245

51

111

1125

171

1065

231

1005

```
/organism="Homo sapiens"
/mcl_type="mkNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="tNAGB:6041256"
/tissue_type="embryonal carcinoma, cell line"
/tab hose="mind (phage-resistant)"
/clone_lib="nH10B (phage-resistant)"
/clone_lib="nH40C 92"
/note="Organ: testis; Vector: pCMV-SPORT6; Site_1: NotI;
/site_2: Sali; Cloned unidirectionally; oligo-dT primed.
/verage insert size_2: 5 kb. Library enriched for
/kull-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                         1333 ACTGGAATTCACCAACTGGAGGCATCTACCCCAATACCA------GGCTGCCAGCTG 1383
                                                                                                                                                                                      1162 actigacerceceannagada arctaececa acerececede arcera 1221
                                                                                                                                                                                                                                                                                                                                                     mRNA linear EST 02-MAY-2002 sapiens cDNA clone IMAGE:6041526
                CATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGATGAACTTTGTAG 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E I (bases 1 to 880)

IS NHF-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

AL Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov h column: 07

High quality sequence stop: 608.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 880)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAAGCAATAATTATTAACATTTATTAACGATCAATAAACTTGATTGCATTATGGC
                                                CTTCTGACATCTCCTACCTTCCTACCATGCCCACCAGCAGAAGTGAACTTTGTCC
                                                                                    1273 CICCCCATCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTGCTGCCCCTAATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACATTATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33.5%; Score 485.4; DB 13; Length llarity 84.4%; Pred. No. 1e-133; Conservative 0; Mismatches 101; Indels
                                                                                                                                                                                                                                1384 CICATATGCCTTCCCATCTTGGCACCTACTA 1417
                                                                                                                                                                                                                                                      да
Ношо
                                                                                                                                                                                                                                                                                                                                                      BQ233264
AGENCOURT 7565836 NIH_MGC_92
5', mENA Sequence.
BQ233264.1 GI:20414664
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 546; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                    1042
                      1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match
                                                                                                                                                                                                                                                                                                                   RESULT 13
BQ233264
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Mat
Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               & g
                      음성
                                                                             ò
                                                                                                                  a
                                                                                                                                                          8
                                                                                                                                                                                    쉱
                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAGGGCACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTCGGCGTTGGG 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTATGACAAAATATTATGACTAAAGTTCATGGTAAACGCTATGCCTACAAATTTGATT 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCACTTCGCTACT 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    921
                                                                                                                                                                                                                                                                                                                                             AGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACTGCATCACCT 972
                                                                                                                                                                                                               147
                                                                                                                                                                                                                                                 GCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGATGAACTATGGAA 378
                                                                                                                                                                                                                                                                                                                      435
                                                                                                                                                                                                                                                                                                                                                                                            TIATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGGCAGTGCCTGGAGT 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAACATTGATG 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAAAGAGTIGIGIAAAATGACCAAAAGATGACTTCCAGAGACTCACGCCGAGCTATAACG 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAGGAACTGTGAAAATGAACAAGGAGGACTTCCTCCGTGCCACCACCTCTACAACA 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGAGCCAGATTTACCTT 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCC---CACTCAGTCAAAAG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACCCAACCATCATCTTCAACAGTGCCCAAAACAGACCAGCGTCCTCAGTTAGATC 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITAICAGAITCITGGACCGACCAGCAGCGGTCTTGCAAAICCAGGGAGTGGGCAGATAC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGNNNNNNNNAAAGCGGGCAGATCC 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accrerescharrecrecresaderecrereceaedecechaecechaerererer 801
                                                                                                                                                                                                                                                                                   GCGTTAGCAAATGCAAGCTGGTGGGGGGGGGGGGGGGCGAACCCCATGAACTACAACA 207
                                                                                                                                                                                                                                                                                                                                                                                                                              rearcerecedadaceceaearereresacacadagecarereageaareaeregadr 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cedaagrecrerrercacrecreagriacercaegaaag-----rreacrecreecr 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAATACAACCTCCCACACCGACCAATCCTCACGACTGAGTGTCAAAGAAGACCCTTCTT 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Archerchicheadadadadarddacarahacardaarrergecercaacaaaagre 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         crecerregaegegeacaaaacearcagraagaaracagaegaacegececeagecagare 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    862 GCGAGCGGAAAAGCAAGCCCAACATGAATTACGACAAGCTGAGCCGGGCCCTCCGTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCACGGAATCGCTCAGCCCTCCAGCCTCCAGAATCATCCATGTACAAATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        802 eddaleddalecaaceleddalerrcaaalteacelacecelareaegreecaelede
                                                                                                                                                                             259 TTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACCTGATGACTGCA
                                                                                                                                                                                                               TCAACININIAAGCGGGININIATGACCACATGAATGGATCCAGGGAGTCTCCGGTGGACTGCA
                                                                                                                                                                                                                                                                                                                        GCTACATGGAAGAAGCAT - - - ATTCCGCCTCCAAATATGACAACCAATGAACGAAGAG
                                                                                                                                           Gaps
                                                                                                                                         21;
                                                                                                       Length 1256;
                                                                                                     tch 34.6%; Score 501.2; DB 29; Length al Similarity 66.2%; Pred. No. 2.2e-138; 777; Conservative 0; Mismatches 376; Indels
/db_xref="taxon:9598"
<1. ...>1256
/gene="FLII"
/locus_tag="HCM6709"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1153
                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                   319
                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                        379
                                                                                                                                                                                                                                                                                                                                                          208
                                                                                                                                                                                                                                                                                                                                                                                              436
                                                                                                                                                                                                                                                                                                                                                                                                                                  268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       982
                                                                                                         Query Match
                                                                                                                          Local
                                                                                                                                         Matches
                      gene
                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ व ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6 8 6 8 6
                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
장
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          БЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                   ò
```

127 138

78 67

Gaps ..

4

843

d ઠે DP à g ò Di Di à a ò

185

783

65

903 245 963

us-09-902-772-1.rst

ò a ò qq ò 원 상

```
BG388025 112-MAR-2001
602412867F1 NIH_MGC_92 Homo saplens CDNA clone IMAGE:4521233 5',
mRNA sequence.
BG388025.1 GI:13281471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                964 GCATCACCTGGGAGGGCACACAAATGGGGAGTTCAAGATGACAGACCCTGATGAAGTGGCTC 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1024 GGCGTTGGGGAGAGAGAAAAGCAAACCTAACATGAACTATGACAAACTCAGCCGTGCAC 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1084 TICGCIACIACIAIGACAAAAATATIAIGACIAAAGITICAIGGIAAACGCIAIGCIACA 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1204 ACAAATACCCCATCAGACCTCCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGATGA 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1264 ACTITIGIAGCICCCCATCCCCCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCCC 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               306 GCATCACCTGGGGAAGTCACCAACGGGGGGTTCAAGATGACGGATCCCGACGAGGTGGCCC 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   246 GCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGCTCCAACTCCAGCT 305
                                                                                                                                                                                                                                                                                                                                                                                                        66 ATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGGTCACGGCCACCCCAGCCC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 715)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  486 AGTICGACTICCACGGGATCGCCCAGGCCTCCAGCCCCAGCCCCCGGAGTCATCTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      546 ACAAGTACCCCTCAGACCT-CCGTACATGGGCTCCTATCACGCCCACCACAGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     667 TTATTTTCCAAATACATCAGTTTACCCAGAAGCAACGCAAAGAATAACAACAAGGCCAG
                                                                                                                                                                                                                                                            6 TITITITICONAATACTICAGTATATCCTGAAGCTACGCAAAGAATTACAACTAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784 AGICAAAAGCTACCCAACCATCATCTTCAACAGTGCCCAAAAACAGAAGACCAGCGTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126 AGTCGAAAGCTGCTCAACCATCTCCTTCCAGATGCCCAAAACTGAAGACCAGGCGTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844 AGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904 GGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTGTCGGACAGCTCCAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           366 GOCGCTGGGGGAGAGCGGAAGAGCCAACATGAACTACGATAAGCTCAGCCGGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              426 TCCGTTACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCTACGCCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1144 AATTIGATTICCACGGGATCGCTCAGGCCTCCAGCCTCCAGAATCATCCATGT
                                                                                                                                                                                                                                                                                                                                                             727 ATTTACCTTATGAGCAAGCGAGGATCAGCGTGGACGAGTCACAGCCATCCCA---CTC
                                                                                                                                           Gaps
                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
33.4%; Score 483.4; DB 14; Length 7
Best Local Similarity 84.0%; Pred. No. 3.6e-133;
Matches 593; Conservative 0; Mismatches 107; Indels .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
BG388025
   ORIGIN
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Envaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria; Primates, Catarrhini, Hominidae, Homo.

Mammalia; Eutheria; Primates, Catarrhini, Hominidae, Homo.

Mannalia; Et analysis of human adipose gene expression

Est analysis of human adipose gene expression

Contact: Gong Da-Wei

Division of Endocrinology, Diabetes and Nutrition
University of Maryland
660 Redwood St, HH497, Baltimore, MD 21201, USA
Tel: 410 706 1672
Ema: 410 706 1672
Email: dgong@medicine.umaryland.edu
PCR PRIMERS
PCR PCR PRIMERS
PCR PRIMERS
PCR PRIMERS
PCR PRIMERS
PCR PRIMERS
PCR PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CB269538 1008445 Human Fat Cell 5'-Stretch Plus cDNA Library Homo sapiens CB269538.1 GI:28444123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             499 GCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATCATGTTATTCCAGAA 558
                                                                         198
                                                                                                                                               247
                                                                                                                                                                                                                 258
                                                                                                                                                                                                                                                                                           307
                                                                                                                                                                                                                                                                                                                              259 CAGGGTCACCATCAAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGGAACTCCC 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  319 TGATGAATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCCAGACACCCGTTGGGAT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     439 GCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGCGGCAGTG 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGGTCACCCCCAG 618
   187
                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATGACTGCAGCGTGGCAAAAGGAGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGAT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGA 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATTGATGGGAAAGAGTTGTGAAAATGACCAAAGATGACTTCCAGAGACTCACGCGGAG 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Library'
                                          CTACGGAACGCCACACGTGGCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             379 GAACTACGGCAGCTACATGGAGGAGGAGGCACATGCCACCCCCAAACATGACCACGAACAA
   CTACGGATCGCCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCCTTCCAGTGAATATGG
                                                                                                                                           188 GCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGCCCCCGGC
                                                                                                                                                                                                             199 ACAGACTÍCCAAGATGAGCCCACGCGTCCCTCAGCAGGATÍGGCTGTCTCAACCCCCAGC
                                                                                                                                                                                                                                                                                       CAGAGITTACCATTAAGATGGAGTGTAACCCAAACCAGGTTAATGGGTCAAGGAATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGAAGAGTTATTGTGCCAGCAGCAGTTCCTACGTTATGGAGCACAGAGCCATGTACGGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGAGTGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Location (Adainst the Control of Control o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTÁTAACGCAGATATCCTCCTGTCACACTACÁCTACCTCAGAGAGA 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                                                                                                                                                                           248
                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                     139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 609
128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
CB269538
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
```

1203

604

485

```
/usure="manny" corrections of the following continuous 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTATGG 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 GCAAACATCAAAGATGAGCCCGGCGCTTCCCCAGCAGGACTGGTTATCACAGCCCCGGG 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         339 TGATGAATGCAGTGTGGCCCAAAGGCGGGAAGATGGTGGGCGAGCCCAGACACCGTTGGGAT 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459 GCGCNGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGGGGCAGTG 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCIGGAGIGGGCAGIGAAGGAGIAIGGICIICCAGACGIGGACAICIIGIIGIICCAGAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519 GCTGGAGTGGGCGGTGAAAAAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      579 carcaaradaaaadaaacraficaadardaccaaadacaacrircaadagacrcaaccccad 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 219 acagacriccaagargacccacgcgrcccrcaggaggaggaggrccrcaaggaggaggagg 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATGACTGCAGCGTGGCAAAAGGGGGAAAATGGTTAGCAGTTCAGACAATGTTGGGAT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTATGGAAGCTACATGGAAGAAGCATATTCCGCCTCCAAATATGACAACCAATGA 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       399 gaactacgecagetacatggaggagaagaagacatgecaceeecaacatgaccacagaacga 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACGAAGAGITATIGIGCCAGCAGAICCIACGITAIGGAGCACAGACCAIGIACGGCAGIG 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548 CATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACGCGAG 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 AAGCACTATTAAGGAAGCATTATCAGTGAGTGAAGACCAGTCCTTGTTTGAGTGTGC 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CIACGGATCGCCCACCTTGCAAAGACAGAAATGACAGCCTCCTCTTCCAGTGAATATGG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAGTTACCATTAAGATGGAGTGTAACCCAAAACCAGGTTAATGGGTCAAGGAATTCACC 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39 GAGAAGCAATAATTATTAACATTTATTAACGATCAATAAACTTGATTACATTATGGC 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 GCGAACGAATAATTATTAGCAATTATTAGCGATCAATAATCTTGATCACTATATGGC
                                                                                                                                                     þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
Tissue Procurement: ATCC cDNA Library Preparation: Life Technologies, Inc. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov.f. column: 18 Plate: LLAMI0420 row: f column: 18 High quality sequence stop: 693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATAACGCAGATATCCTCTGTCACACCTACACTACCTCAGAGAGA 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 33.3%; Score 482.2; DB 12; Length Best Local Similarity 84.1%; Pred. No. 8.2e-133; Matches 544; Conservative 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                  1. .715
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         488
                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

Search completed: May 27, 2004, 17:47:59 Job time : 4104 secs

```
100.0
                                                                                                                                                                                                                                                                                                              2414.5
2414.5
2327.5
2313
2313
2267
2192
2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1599
1579.5
                                                                                                                                                                                                                                                                                                                                                                                                        2179
2159.5
2153.5
2151
1955.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1926
1810
1807.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1624.5
1624.5
1624.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1624.5
1624.5
1624.5
1621.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1613.5
1613.5
1613.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1576
1567.5
1536.5
1486.5
                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1637
1624.5
1624.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1183.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1624.5
1624.5
1624.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
                                                                                                                                                                                                                                                Result
                                                                                                                                                                                                                                                                                                                                                                                                       Command line parameters:
-MODEL=frame+ p2n.mcdel.-DEV=xlh
-Q=/Cgn2_1/USPTO_spool/USC9902772/runat_27052004_162841_2144/app_query.fasta_1.647
-Q=/Cgn2_1/USPTO_spool/USC9902772/runat_27052004_162841_2144/app_query.fasta_1.647
-Q=/Cgn2_1/USPTO_spool/USC9902772/runat_27052004_162841_1-LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40.cdi -LIST=45
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40.cdi -LIST=45
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40.cdi -LIST=45
-UNITS=bits -START=1 -END=-1 -MATRIX=DOONO00000
-USER=USO9902772_@CGN_1 1_3731_@runat_27052004_162841_2144 -NCPU=6 -ICPU=3
-NO MAAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DBV_TINEOUT=120 -WARN TIMEOUT=30 -THARADS=1 -XGAPOF=10 -XGAPEXT=0.5 -FGAPOP=6
                                                                                          (without alignments)
3480.098 Million cell updates/sec
                                                                                                                            US-09-902-772-2
2444
1 MASTIKEALSVVSEDQSLFE......IYPNTRLPAAHMPSHLGTXY 451
                                                                            May 27, 2004, 19:27:37 ; Search time 5617 Seconds
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                  OM protein - nucleic search, using frame plus p2n model
                                                                                                                                                                                                                                                              3470272 seqs, 21671516995 residues
                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                              0.07
0.00
0.00
                                                                                                                                                                              BLOSUM62
Xgapp 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gb htg: *
gb htg: *
gb htg: *
gb con: *
gb pl: *
gb vi: *
gb vi: *
em fun: *
em hum: *
em mi: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         em pat: *
em ph: *
em pl: *
em ro: *
em ro: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenEmbl:*
                                                                                                                                                                                                                                                                                                                Minimum DB seq
Maximum DB seq
                                                                                                                                              score:
                                                                                                                                                                                  Scoring table:
                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database
                                                                                                                                                                                                                                                              Searched:
                                                                                                                               Title:
Perfect
                                                                            Run on:
```

17254 Human erg2 AB031088 Rattus no AB073079 Mus muscu

BC040168 AB073080 XLAJ4126

AB031088 AB073079 XLAJ4125 AB073078

10

HUMERG2

AJ224125 Xenopus l AB073078 Mus muscu

AX657234 HUMERG11 AX657232 DRE249590

AY029368 BC010115

```
AY065661 Gallus ga
E31253 Protein hav
X77159 G.gallus ER
E31254 Protein hav
AX657228 Sequence
BC040168 Homo sapi
ABC73080 Mus muscu
AJ224126 Xenopus 1
M17254 Human erg2
                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                    AY065661
E31253
GGERG
                                                                                                                                                                                                                                                                                                                            E31254
AX657228
                                                                                                                                       em_htgo_mus:*
em_htgo_other:*
                                     em_htg_other:*
                                                em_htg_mus:*
em_htg_pln:*
em_htg_rod:*
                                                                                                                          htgo hum:*
                                                                                        mam: *
                                                                                                   Vrt: *
                                                                                                                                                                                                                                                    Query
Match Length
em vi:*
```

Y14773 Coturnix co X66979 X.laevis mR Y14774 Coturnix co M93255 Human FLI-1 AF177538 Danio rer BC055627 Danio rer S66169 Erg-3=immun AX657230 Sequence AX657234 Sequence AX65723 Sequence AX65723 Sequence AX6559 Sequence AX6559 Sequence AX05358 Homo sapi BC010115 Homo sapi AX6010 I Sequence X67001 H. sapiens H AX687825 Sequence AX69582 Sequence AX69582 Sequence BC001670 Homo sapi AY029367 Synthetic S45205 Fli-1=Frien X59421 Mouse Fli-1 BC056588 Danio rer BD094081 Shear str 4F327066 Homo sapi 4P001423 Homo sapi AX695580 Sequence AX695579 Sequence S72621 EWS AX587825 AX695582 HUMERGBFLI BC001670 AY029367 A36461 AR080101 AX695580 BC056588 CCRNAFLI HSHUMFLI 10 2954 3490 4403 3545 1431

ALIGNMENTS

```
1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                              576
                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          966
                                                                                                           100
                                                                                                                                      336
                                                                                                                                                                  120
                                                                                                                                                                                           396
                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                 456
                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                        516
                         216
                                                                               276
 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerAsn
                                                                                                                                                                                                                                                                                                                                                                                            ProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTITITATITITICCAAATACATCAGTITIACCCAGAAGCAACGCAAGGAATAACAACAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnSerLysAlaThrGlnProSerSerThrValProLysThrGluAspGlnArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysileThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgargTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cedeciriogegacadacadadecadacerdacadecadecadecadecedeca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACAAATACCCATCAGACCTCCCTACATGAGTTCCTACCATGCACACCCCCAGAAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePheAlaAla
                                                                                                                                                                                                                                                                                                                                                   CAGAACATTGATGGGAAAGAGTTGTGTAAAAATGACCAAAGATGACTTCCAGAGAACTCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LyspheAspPheHisGlylleAlaGlnAlaLeuGlnProHisProProGluSerSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMet
                                                                                                                          AsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHisValArg
                                                                                                                                                                                                                                                                             GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
                                                                                                                                                                                                                                                                                                                                   GlnasnileaspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                            LeuargiyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyr
                 157 TATGGGCAAACATCAAAGATGAGCCCGCGCGTTCCCCCAGCAGGACTGGTTATCACAGCCC
                                                                         217 CCGCCCAGAGTTACCATTAAGATGGAGTGTAACCCAAACCCAGGTTAATGGGTCAAGGAAT
                                                                                                         SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal
                                                                                                                                                                  101 GlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrThr
                                                                                                                                                                                     337 GGGATGAACTATGGAAGCTACATGGAAGAGAGAGAGATATTCCGCCTCCAAATATGACAACC
                                                                                                                                                                                                                                        397 AATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGG
                                                                                                                                                                                                                                                                                                           CAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGTCAAAAGCTACCCAACCATCTTCAACAGTGCCCAAAACAGAAGACCAGCGTCCT
                                                        ProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                     577
                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                          457
                                                                                                                                                                                                                                                                                                                                                                 517
                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
    41
                                                       61
                                                                                                            81
                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                            & 8
                                                                                                                                                                                                                                                                                                                                                                                      ර සි ර
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       장 쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    D
D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                    a
                                                 8 8 8
                                                                                                                                 g
                                                                                                                                                                 8 8
                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Gallus gallus"
/mol_type="mRNA"
/do_txref="taxon:9031"
/do_txref="taxon:9031"
37...1392
/note="alternatively spliced; transcription factor"
/codon_staxt=1
/product="erg_isoform C-1-1"
/protein_id="Aal40889.1"
/fib_xref="Galton="MASTIKEALSVVSEDQSLFECAYGSPHLAKTEWTASSSSEYGQT
ktanslation="MASTIKEALSVVSEDQSLFECAYGSPHLAKTEWTASSSSEYGQT
SKAMSPRVDQDWLSQPPRAYTIKMECNPNQYMGSRNSPDDCSVAKGGKAVVSSDNVGM
NYGSYMEEKHI PPPNAYTINBRKVIVDADPTLMSTDHYRQMLEMAYERYGLEPDVDILLF
QNIDDGKELCKAMTANDPQRATISKATYOPSSSTVANDILLEHLHYLEREGATFIFPNTSVYPEATQRIT
TRPDLPYEQARRSAMTSHSTYNDSKATYOPSSSTVANDILLENDSVRUGBFRGATGRIT
TRPDLPYEQARRSAMTSHSTYNDSKATYOPSSSTVANDILLSPRAHMPSHLGTYSSRLA
NFGSGQIQLWQFLLELLSDSSNSNCTTWEGTNGBFRKATDPDBVARRWGERKSKPNDLNY
DKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPPRESSNYKYPSDLPYMSS
YHAPPQKONNFVAPHDPALPVTSSSFFRAAPNPWNNSPTGGIYPNTRLPAAHMPSHLGTY
'"
                                                                                          Gallus gallus (chicken)

Gallus gallus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Phasianinae; Gallus.

1 (bases 1 to 1413)

Iwamoto,M., Higuchi,X. Koyama,E., Enomoto-Iwamoto,M., Kurisu,K., Yeh,H., Abrams,W.R., Rosenbloom,J. and Pacifici,M.

Transcription factor ERG variants and functional diversification of chondrocytes during limb long bone development

20351415
                AY065661
Gallus gallus erg isoform C-1-1 mRNA, complete cds; alternatively
                                                                                                                                                                                                                                                                                                                                                                             3 (bases 1 to 1413)
Iwamoto,M., Higuchi,Y., Yeh,H. and Pacifici,M.
Direct Submission
Submitted (05-DEC-2001) Oral Anatomy and Developmental Biology,
Osaka University Faculty of Dentistry, 1-8 Yamadaoka, Suita, Osaka
565-0871, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156
                                                                                                                                                                                                                                                                            Chases 1 to 1413)
Mamoto,M., Higuchi,Y., Enconoto-Iwamoto,M., Kurisu,K., Koyama,E., Yeh,H., Rosenbloom,J. and Pacifici,M.
The role of ERG (ets related gene) in cartilage development 21535378
11680687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MethlaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1413
451
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1-1413)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1. .1413
                                                                    GI:17887440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x AY065661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.02e-162
2444.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2 (1-451)
                                                        AY065661 -
AY065661.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                 .0893254
                             Gallus g
spliced.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
AY065661
LOCUS
DEFINITION
                                                                                                                                                                                                                                     JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      വാ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                          TITLE
```

à g à 엄 us-09-902-772-2.p2n.rge

```
181
                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1203
                                                                                                                                                                                                                                                                                                                                            261
                                         81
                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 8 8
8
                                                                                                                      8 6 8
                                                                                                                                                                        8 6 8 6 8 6
                                                                                                                                                                                                                                                                        6 8 8
                                                                                                                                                                                                                                                                                                                       원
장
연
                                                                                                                                                                                                                                                                                                                                                                       충영
                                                     С
                                                                                                     ፟
                      g
                                        8
                                                                       δ
                                                                                    셤
                                                                                                                                                                                                                                DENNSYLVANTA
OS Unidentified
PN 1999075871-A/1
DD 23-MAR-1999
PP 29-MXY-1999 UP 1998166076
PP 29-MXY-1999 UP 1998166076
PR 18-UTN-1997 US 60/050297 PI
HIROXAGU TWAMOTO, YOSHINOBU HIGUCHI, WARIJIO PASHIFIKI, PI JOEL
ROZENBURGOM,
PI HELENA E
C12P1/02, A61K48/00, C07K14/465, C07K16/18, C12Q1/68/A61K38/00,
PC C12P1/06, C12N15/00, A61K37/02
CC Strandedness: Single,
CC Topology: Linear;
PH Key
L1 1447
FT source
                                                                                                   Protein having cell calcifying inhibitory activity and gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MetalaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuProAla
                                                                                                                                                                                   1 (bases 1 to 1447)
Hiroyasu, I., Yoshinobu, H., Marijio, P., Joel, R. and Helena, B.
Protein having cell calcifying inhibitory activity and gene
                                                                                                                                                                                                           encoding the same
Patent: JP 1999075871-A 1 23-MAR-1999;
CHUGAI PHARMACEUT CO LTD, HE TRUSTEES OF THE UNIVERSITY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                             1447
451
0
0
0
                                                                                                                                                                                                                                                                                                                                                                 /organism='Unidentified'
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                        1. .1447
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-902-772-2 (1-451) x E31253 (1-1447)
                                                                                                                                         E31253.1 GI:13025685
JP 1999075871-A/1.
unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                              2.08e-162
2444.00
100.00%
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                    E31253
                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
         1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                         421
                                                                                        RESULT 2
E31253
LOCUS
DEFINITION
                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
        8 B
                                      Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 장
                                                        à
```

```
1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281 GlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsn 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysileThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                       662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           962
100
                                                                                                   362
                                                                                                                                                                      422
                                                                                                                                                                                                           140
                                                                                                                                                                                                                                           482
                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                  602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  723 CCAGATTACCTTATGAGCAAGCGAGGAGATCACCGTGGACGAGTCACAGCCATCCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1083 CTTCGCTACTACTATGACAAAATATTATGACTAAAGTTCATGGTAAAGGCTATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LyspheAsppheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161 GlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLeuAspProTyrGln1leLeuGlyProThrSerSerArgLeuAlaAsnProGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843 CAGTTAGATCCTTATCAGATTCTTGGACCGACCAGCAGCCGTCTTGCAAATCCAGGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                903 GGGCAGATACAGCTATCCTACTGGAGCTTCTGTCGGACACAGCTCCAACTCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeukrgTyrTyrAspLysAsn1leMetThrLysValHisGlyLysArgTyrAlaTyr
                                                                                                                                                                                                                                                                                                                                                                        543 CAGAACATTGATGGGAAAGAGTTGTGTGAAAATGACCAAAGATGACTTCCAGAGACTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                      201 ThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgileThrThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMet
                                                                                                                                                             363 GGGATGAACTATGGAAGCTACATGGAAGAAGAAGCATATTCCGCCTCCAAATATGACAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgPro
                                                                     SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsnVal
                                                                                           101 GlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrThr
                                                                                                                                                                                                           121 AsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHisValArg
                                                                                                                                                                                                                                             423 AATGAACGAAGAGTTATTGTGCCAGCAGATCCTACGTTATGGAGCACAGACCATGTACGG
                                                                                                                                                                                                                                                                             GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
                                                                                                                                                                                                                                                                                                   483 CAGTGGCTGGAGTGGGCAGTGAAGAAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                       ProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ArgargTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAla
```

us-09-902-772-2.p2n.rge

421 ProAsnProT) 	ProasnProTyrTrpasnSerProThrGlyGlyIleTyrProasnThrArgLeuProala 440 	ag Db	AIGGCAAGCACTATTAAGGAAGCATTATCAGTGGTGAGTGAAGAACCAGTCCTTGTTTGAG
441 AlaHis 1383 GCTCAT	AlahismetProserhisleuGlyThrTyrTyr 451 	& A ———	21 CygalafyrGlyGerProHisleuAlafysThrGluMetThrAlaSerSerSerGlu 40
Ç Ç		& a	41 TyrglyglnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro 60
GGERG G.gallus X77159 X77159.1	ERG mRNA. C1-AFK-1995 GRG mRNA. G1:790439	8 8	61 ProblaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn 80
ERG gene Gallus g	. ".	, vo	SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal
Gallus c Eukaryot	Gallus gallus Sukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,	୍ ପୁ	303 TCACCTGATGACTGCAGCGTGGCAAAAGGAGGAAAATGGTTAGCAGTTCAGACAATGTT 362
Phasiani T	iia; aves; neognathae; calliformes; rhastantaae; nae; Gallus.	ò	101 GlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrThr 120
Dhordain Ditermie	Dhordain, P., Dewitte, F., Desbiens, X., Stehelin, D. and Dhibermie المراكبة المراك	qq	363 GGGATGAACTATGGAAGCTACATGGAAGAGAGATTTTTCCGCCTCCAAATATGACAACC 422
Mesoderm precarti Mech. De	Description of the chicken erg gene associated with precaderial expression of the chicken erg gene associated with precaderial laginous condensation and cartilage differentiation Mech. Dev. 50 (1), 17-28 (1995)	<i>&</i> €	121 ASEGIUARGARGVAILIEVAIPROALAASPPROTHRIGEUTIPSETHRASPHISVALARG 140
95329425 7605748		8	GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
2 (base Duterque	2 (bases 1 to 1516) Duterque Coquillaud, M.	. අ	CAGTGGCTGGAGTGGGGCAGTGAAGGAGTATGGTCTTCCAGACGTGGACATCTTGTTGTTGT
Direct & Submitte Oncologi	Direcs Submission Submitted (17-JAN-1994) M. Duterque-Coquillaud, CNRS UA 1160, Oncologie Moleculaire, Institut Pasteur, 1 rue Calmette, 59019	8 :	GInAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
rille, r	ANNUE Location/Qualifiers	<u>a</u>	CAGAACAIIGAIGGGAAAAGAGIIGIGIAAAAIGACCAAAGAIGACIICCAGAGACICACG
	11516 /organism="gallus gallus" /mol type="mRNA"	& <u>8</u>	181 ProSerryrAsnalaAspileLeuLeuSerHisLeuHisTyrLeuArg3luArg 198
	/db_xref="taxon:9031" /tissue_type="splen" /tissue_type="splen"	8	198 198
	/cione_in="lampaa_grio" /dev.stage="adult" 	අු	663 CCACATITGACTICAGAIGAIGAIGAIAAGGCCTIACAAAACTCTCCACGGITAAIGCAI 722
	11516 //gene="ERG"	ò	199GlyalaThrPheIlePheProAsnThrSerValTyrProGluala 213
	031439 /gene="ERG"	q _Q	723 GCTAGAAACACAGGAGCCACTTTTATTTTCCAAATACATCAGTTTACCCAGAGGA 782
	/codom start=1 /protein id="CAA54404.1"	λŏ	214 ThrolnArgileThribrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrp 233
	/db xref="G1:/90440" /db xref="G0A:09837" /db xref="G0A:09837"	ব্য	783 ACGCAAAGAATAACAACGCCAGATTTACCTTATGAGCAAGGAGAGATACAGCGTGG 842
	/GD_XKEI="SWISS-rKCT:[90857" /translation="MASTIKEALEVSEDGEFECAYGEPHLAKTEMTASSSEYGQT KKMSPRYDOOPMIGODDARTYTKMERNEDHOYMGRANSPONDCSVKYSSGRNAVGM	۵۸	234 ThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValPro 253
	NYGSYMBEKHI PPROMITURKKU VARDETLIKSTDHYRQNIEMAVKEYGLEVOUILLE NYTOSYMBEKHI PPROMITURKKU VARDETLIKSTDHYRQNIEMAVKEYGLEVOUILLE ONI DGKKI, CKMYKDDFORI TOSYNADII 1, SHI HYI, RETEI, PHI TASDDYJK AI, ONS DRI,	qa	843 ACGAGTCACAGCCATCCCACTCAGATCAAAGCTACCCAACCATCATCTTCAACAGTGCCC 902
	MHARNIGGATFIFPNTSVYPBATQRITTRPDLPYBQARRSAWISHSHPTQSKAZQPSS STVPRTBDQPPOLLDPYOILGPTSSRLANPSGGOTOINGLIFFLSDSSNXNKTTWRGT	ò	254 LysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSer 273
	NGE FKWTDPDEVARRWGERKSKPNMYYDKLSRALRYYDKNIMTKVHGKRYAYKFDFH GI AOALOPHPDESSMYKYPSDLPYMSSYTAHPOKMYPVA HPDPALPVTSSSRPAA DND	ব্য	903 AAAACAGAAGACCAGCTCCTCAGTTAGATCCTTATCAGATTCTTGGACCCACCAGCAGC
	1	8 :	
		Q	963 CGTCTTGCAAATCCAGGGGGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTG 1022

1 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu 20

US-09-902-772-2 (1-451) x GGERG (1-1516)

8 8 8 8 8

450 0 1 27 1

Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:

2.57e-160 2414.50 94.14% 94.14% 98.79%

Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:

TyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLysVal 353

ស

1	101 GlyMetAsnTyrGlySerTyrMetGluGluLysHisIll	483 CAGIGGCIGGAGIGAAGGAGIGAAGGACTICCAGACGIGGACATTGTTGTTC 5 161 GlnasnileaspGlyLysGluLeuCysLysMetThrLysaspAspPheGlnArgLeuThr 1 543 CAGIAGATTGATGGGAAGGAGTTGTGTAAAATGACCTTCCAGAGATTCTTGTTC 5 161 GlnasnileaspGlyLysGluLeuCysLysMetThrLysaspAspPheGlnArgLeuThr 1 543 CAGAACATTGATGGGAAGGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACG 181 ProSerTyRAsnAlaAspIleleuLeuSsRHisLeuHisTyrLeuArgGluArg 603 CCGAGCTATAACGCAGATATCCTCCTGTCACACCTACACTACACTACACTCCTCTT 6	663 CCACATTTGACTTCAGATGATGATGATAAGGCCTTACAAAACTCT 199	234 INISERIA BSERIA PROJUCTION CONTROLLE CONTR	294 Se 1023 TC 314 Th 1083 AC
3 3 <td>5</td> <td>3 8 8 8 8 8</td> <td>8 8 8 8 8</td> <td>6 6 6 6 6</td> <td>3 3 4 5 </td>	5	3 8 8 8 8 8	8 8 8 8 8	6 6 6 6 6	3 3 4 5
Db 1143 TATGACAAACTCAGCCGTGCACTTCGCTACTATGACAAAATATTATGACTAAAGTT 1202 Qy 354 HisGlyLysAxgTyxAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnPro 373	434 ProAsnThrargleuProAlaAlaHisNetProSerHisLeuGlyThrTyrTyr 451 1443 CCCAATACCAGGCTGCCACTGCTCATATGCTTCCCATCTTGGCACCTACTAC 1496 1254 E31254 E31255 FINITION Protein having cell calcifying inhibitory activity and gene encoding the same. 55510N E31254 G7.13025686	S H DE A	PN JP 1999075871-A/2 PD 23-MAR-1999 PF 29-MAY-1999 UP 1998166076 PR 18-JUN-1997 US 08/878177,20-JUN-1997 US 60/050297 PI HIROVARGU IMMONTO, YOSHINOBU HIGUCHI, MARIJIO PASHIFIKI, PI JOEL ROZENBURCOM, PI HELENA E PC 012N1/02, AGIK48/00,C07K14/465,C07K16/18,C12Q1/68//AGIK38/00, PC C12P21/02, C12P21/02, C12P21/03, C12N15/00,AGIK37/02 PC SIZARAGENESS: Single;	CC ropology: Linear; FH FY Source Location/Qualifiers FT Source Location/Qualifiers FT Location/Qualifiers Source Corresting Location/Qualifiers 1.1528	Alignment Scores: 2.6e-160 Length: 1528 Pred. No.: 2414.50 Matches: 450 Score: 94.14\$ Conservative: 0 Percent Similarity: 94.14\$ Mismatches: 1 Query Match: 69.73\$ Gaps: 1 US-09-902-772-2 (1-451) x E31254 (1-1528)

AlaryrdlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyr

22

41

```
151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   염 강 염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
장
                                                                                                                                                                                                                                                                                                                                         $ g
                                                                                                                                                                                                                                                                                                                                                                                                                                           8 y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठे है ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 & B
                                                                                                                                                                                                                                                        ૅ
                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                              ò
               8 8
                                                                             g
                                                                                                         장 웜
                                                                                                                                                                                            8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      //OCDOD_ENTAILE_DESCRIPTION FOR THE PROPERTY OF THE PROPERTY O
                                                                                    1262
                                                                                                                                                                                                                                   1382
                                                                                                                                                                                                                                                                                                          1442
                                                                                                                                                        CACCCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTAC 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Luyten, F., de Bari, C. and Dell'Accio, F.

polynucleotide sequences and vectors useful for the prevention or treatment of bone- or cartilage-related disorders

treatment: WO 0300724-A 1 03-JAN-2003;

Tigenix N.V. (BE)

Location/Qualifiers

to Goanism="Homo sapiens"

/mol type="unassigned DNA"
/do xref="taxon:9506"
/cof _ 1446
/cof _ 1446
/cof = "unnamed protein product"
                                                                                                                                                                                                413
                                                                                                                                                                                                                                                                      433
                                                                                                                         393
                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                  CATGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCGTAACC
                                                                                                                                                                                                                                                                                         HisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnPro
                                                                           CATGGTAAACGCTATGCCTACAAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCT
                                                                                                                         HisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyr
                                                                                                                                                                                              HisAlaHisProGlnLysMetAsnPheValAlaDroHisProProAlaLeuProValThr
                                                                                                                                                                                                                                                                      SerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr
TATGACAAACTCAGCCGTGCACTTCGCTACTACTATATGACAAAATATTATGACTAAAGTT
                                                                                                                                                                                                                                                                                                                                       PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1509
427
10
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX657228 150m Patent W003000724.
AX657228 4I GI:29160006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-1509)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               x AX657228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.24e-154
2327.50
96.90%
94.68%
95.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scores:
                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                            1383
                                                                                                                                                                                                                                                                                                                                                                                   1443
                                                                                                                                                             1263
                                                                                                                                                                                                                                     1323
                                                                                        1203
                                                                                                                           374
                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                         414
                                                    354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Si
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
AX65728
LOCUS
DEFINITION
ACCESSION
VERSION
YERYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                              qq
                                                                                                                         8 8
                                                                                                                                                                                   \dot{\circ}
                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                               ò
                                                  à
```

1050 1110 1170 380 320 340 360 240 810 260 870 280 930 300 990 510 570 630 690 750 270 330 101 390 121 450 141 161 181 201 221 61 81 GlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsn CysileThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla CGGCGCTGGGGGAGAGAGAAGAGCAAACCCAACATGAACTACGATAAGCTCAGCCGCGCC LyspheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMet GGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGCTCCAACTCCAGC ArgArgTrpG1yG1uArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAla LeuargTyrTyrTyrAspLysAsn1leMetThrLysValHisGlyLysArgTyrAlaTyr AspleuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr - - -GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgPro MetasnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrThrAsn GludrgArgValileValProAlaAspProThrLeuTrpSerThrAspHisValArgGln AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro SerTyrasnalaaspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr PhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArgPro GlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySer cadrinadarccrinardadarrcrindadcdaachadradcccccringcaaarccadgcagr GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro ProAspAspCysServalAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly 331 cereargaargeadreresecaaageeggaagargereseggeageageegaacerrese 571 AACATCGATGGGAAGGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCC AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer 871 991 321 1051 341 1111 631 202 222 241 261 281 931 301 361 162 182 211 82 102 122 42 62 271

21

AlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys

ò g ò g à q à g

```
4.75e-153
2313.00
91.44%
89.56%
94.64%
                                                                                                                                                                                                                                                                                                                                                                       gene="ERG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .soform 1"
                                                                                                                                                                                                                                                                                                                                            . .2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No..
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

2E (bases 1 to 2016)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, P.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.L., Wang, J., Haieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstellen, M.J., Usdin, T.B., Toshiyuki, S.,
Garninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, K.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Norley, K.C., Hale, S., Garciarne, P.J., Hulkk, S.W.,
Villalon, D.K., Mazny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Sanchez, A., Whiting, M., Madan, A., Roung, A.C., Shevchenko, Y.,
Butterfield, Y.S., Krzywinski, M.I., Schlautz, J., Myers, R.M.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marre, M.A.
Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EC040168

Homo sapiens v-ets erythroblastosis virus E26 oncogene like (avian), transcript variant 1, mRNA (cDNA clone MGC:49020
IMAGE:6052140), complete cds.
                                                                          1231 TACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCACCACAGAAGATG 1290
                                                                                                                                                                                             1291 AACTITIGIGGGGCCCCACCCICCAGCCCICCCGIGACAICTICCAGITITITIGCIGCC 1350
                                                                                                                                                                                                                                                                                            1351 ccaaacccaracresaarreaccaacressesrararecccaacarascresses 1410
1171 AAGTTCGACTTCCACGGGATCGCCCAGGCCCTCCAGCCCCACCCCCGGAGTCATCTCTG 1230
                                             400
                                                                                                                                               401 AsnPheValAlaProHisProProAlaLeuProValThrSerSerSerPhePheAlaAla 420
                                                                                                                                                                                                                                                  421 ProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuProAla 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (22-NOV-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                               TyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                               1411 AGCCATATGCCTTCTCATCTGGGCACTTACTAC 1443
                                                                                                                                                                                                                                                                                                                                                  441 AlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BC040168.1 GI:25304065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human and mouse cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 2016)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg, R.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22388257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2477932
                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
BC040168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
```

```
TECTURE 11 16="AAH40168.1"

AD XTEEF="GI:5530466"

AD XTEEF="GI:5530466"

AD XTEEF="GI:5530466"

AD XTEEF="GI:5530466"

AD XTEEF="GI:5530466"

AD XTEEF="GI:55304666"

AD XTEEF="GI:55304666"

AD XTEEFERD AD XTEEP AD XTEE
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 84 Row: o Column: 9.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               164 rerecchacearaceracaceraechaaaacacaaaraaceecerecrecrecaecaac 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446. .694
/note="SAM_PNT; Region: Sterile alpha motif (SAM)/Pointed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344 rerecrigargaarigeagrigiegeeeaaaggeeggaaggariggriggeeageeeagaacegrir 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        codon start=1
product="v-ets erythroblastosis virus E26 oncogene like,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 TyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224 Taradacadacriccaadardadcccacdcdrcccrcadcadarrddcrgrcrcaaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 ProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MetalaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal
                                                                                                                                                                                                                              /organism="Homo sapiens"
/organism="Homo sapiens"
/mol_type="mRNA"
/dolone="MRO.49020 IMAGE:6052140"
/tissue_type="Testis, embryonal carcinoma"
/lab_host="NHH MGC_92"
/lab_host="NHHOB"
/note="Vector: pGWV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2016
429
9 13
28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Ets; Region: Ets-domain"
/db_xref="CDD:pfam00178"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PYWNSPIGGIYPNTRLPISHMPSHLGTYY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="CDD:pfam02198"
1031. .1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         db_xref="LocusID:2078"
'db_xref="MIM:165080"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-902-772-2 (1-451) x BC040168 (1-2016)
```

THYLLYSTYPENOSETABLE GTACAAGTACCCCTCCGACC TASSEPPRAYALALAPETOHISP GAACTTTCTGTCTCCCCACC THE STATE STATE STATE TO ST	Fred. No.: 1.46e-144 Length: 2012 Score: 2192.00 Matches: 402
GOOGGAGACATCCANGATCACACACTCCACACACACACACACACACACACACACA	1312 CACGGGAAGCGCTACGCCTACAAGTTTGACTTCCACGGGATTGCCCAGGCCCTGCAGCCC 1371

1331

364

1451

404

1511

424

PRI 08-NOV-1994

```
/note="erg 2 protein"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chordata, Craniata, Vertebrata, Euteleostomi,
Primates, Catarrhini, Hominidae, Homo.
                     1212 GAGAGGAAAAGCAAACCCAACATGAACTATGATAAGCTCAGCCGTGCACTTCGTTACTAC
                                                                                                                                                                 HisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyrLysTyrPro
                                                                                                                                                                                                    TCAGAACTTCCATATATGAGCTCATACCATGCACATCCACAGAAGAAGAACTTGTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                         1452 ececarececeaecritacerereaeareceaereaerrecareceraecerae
                                                                                                              1272 TACGATAAAATATTATGACTAAAGTCCATGGCAAGCGCTATGCTTACAATTTGATTTT
                                                                                                                                                                                                                                                                        SerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsnPheValAla
                                                                                                                                                                                                                                                                                                                                                                         ProHisProProAlaLeuProValThrSerSerSerPhePheAlaAlaProAsnProTyr
                                                                        TyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPheAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2399708
3299708
Criginal source text: Human cell line COLO 320, cDNA to I lambda 12.
Location/Qualifiers
1. 3166
/ Organism="Homo sapiens"
/ Mb_xref="taxon:9606"
/ map="12122.3"
/ map="12122.3"
/ Gene="RRG"
/ Gene="RRG"
/ Gene="RRG"
/ Gene="RRG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 הטיום אמארטים 3166 pp ss-RNA linear
Human erg2 gene encoding erg2 protein, complete cds.
M17254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             erg 2 protein.
Homo sapiens (human)
M Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebi
Bukaryota; Metazoa; Chordate; Catarrhini; Homin
1 (bases 1 to 3166)
Rao, V.N., Papas, T.S. and Reddy, E.S.
erg, a human ets-related gene on chromosome 21 splicing, polyadenylation, and translation
Science 237 (4815), 635-639 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          291. .298
/note="8-bp repeat sequence"
509. .516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerHisLeuGlyThrTyrrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257. .1645
/gene="ERG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M17254.1 GI:182186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87263429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                           345
                                                                                                                                                                               365
                                                                                                                                                                                                                                                                             385
                                                                                                                                                                                                                                                                                                                           1392
                                                                                                                                                                                                                                                                                                                                                                              405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HUMERG2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                             8 6
                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                \dot{\delta}
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAACTCATCCGTTTATCAAGACGCAAACCAAAGAATCCCCAGCAGGCAAGATTATCA 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224
                                                                                                                                                                                                                                                                                                                                   CysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGlyMetAsnTyr 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlySerTyrMetGluGluLygHislleProProProAsnMetThrThrAsnGluArgArg 124
                                                                                                                                                                                                                                                  Arcaaadaadercriricagregreagreaarcaarcagregriarredagrecaaccraceda 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                       regalalares de la contra dela contra de la contra del la contra del la contra del la contra de la contra del la contra de la contra del la contra de la contra del la c
                                                                                                                                                                                                                                                                                                        SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyrGlyGlnThr 44
                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            618 GTGATTGTACCTGCTGACCCTACTTTGTGGAGCACAGATCATGTCAGACAGTGGCTAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGlnAsnIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSerTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGATATCCTTCTCTCGCATCTTCACTACCTCAGAGAAGAGGGTGCCTCTTTATTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             918 TATGAGCCCTCAAGGAGATCTGCTTGGACAAAATCATCCTGCACCA---CCATCAAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCAACCA---TCTACCACAGTTCCCAAAACAGAAGACCCCAGGCCACAGCTAGATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGlyGlnIleGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CICTGGCAATTCTTACTGGAACTGCTTTCGGATACTTCCAACTCCAACTGCATTACTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerlysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValileValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           185 AlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThrPheilePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeuPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrgluglnAlaArgArgSerAlaTrpThrSerHisSerHisProThrGlnSerLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrGlnProSerSerThrValProLysThrGluAspGlnArgProGlnLeuAspPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCAGATICTIGGGCCAACAAGCAGCCGACTIGCAAATCCAGGAAGIGGGCAGATICAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThrTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrpGly
                                                                                                                                                                                                       5 IleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCysAlaTyrGly
                             2222
                             Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                      (1-2012)
                                                                                                                                                      x XLAJ4126
                             94.63%
89.93%
89.69%
escent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                      US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                325
                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                            378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     125
                                                                                                                                                                                                                                                                                                        25
                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
장
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ර් සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                               q
```

mRNA, clone

Ç

21: alternative

g ò

δ

g

당 점

ò a ò

g ó

```
1106
                                                                                                                                                                                      393
                  293
                                                                                                                                                                                                                                                                                         RESULT 10
AB031088
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                  d
                                            දු පු
                                                                              8 8 8
                                                                                                                                 원
                                                                                                                                                                                 රු සි
                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                       셤
  8 B
                              g
                                                                                                                                                    õ
                                                                                                                                                                                                                       ά
                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                 ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsnValGly 101
                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                  ASILIEASDGIyLySGluLeuCySLySMetThrLySASpAspPheGlnArgLeuThrPro 181
                                                                                                                                                                                                                                                                                                                                                                                                                                      SerTyrbsnalaaspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     926 CGGTTAATGCATGCTAGAAACACAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGG 985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292
                                                                                                                                    281 GCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGAGTGT 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrserHisSerHisProThr --- GlnSerLysAlaThrGlnProSerSerSerThrVal 252
                                                                                                                                                                       341 GCCTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTAT 400
                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                   MetAsnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrAsn 121
                                                                                                                                                              41
                                                                                                                                                                                               61
                                                                                                                                                                                                                                 81
                                                                                                                            21
                                                                                                                                                                                              2 AlaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys
                                                                                                                                                              AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr
                                                  3166
407
14
24
14
4
                         21.
                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
/note="8-bp repeat sequence"
13. .3149
/note="putative"
upstream of Pvull site; chromosome
                                                                                                           US-09-902-772-2 (1-451) x HUMERG2 (1-3166)
                                                 1,25e-143
2182.00
91,72%
88.67%
89.28%
                                        Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                        227 bp
          polyA_signal
                                                                                                                                                                                                                                                                                  521
                                                                                                                                                                                                                                                                                                   102
                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                                                                        191
                                                                                                                                                                                                                                                                                                                                                                                                                                                         821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              986
                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                     581
                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                273
                                                                                                                                                                                                                                                                  82
```

8 S d ઠે qq Ωp à g ò d ò g ò a ठे g

 δ

```
underson to the season of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AB031088 1808 bp mRNA linear ROD 07-AUG-2001 Rattus norvegicus VESP14 mRNA for vascular endothelial cell specific protein 14, complete cds.
AB031088.1 GI:15128488
AB031088.1 GI:15128488
Nattus norvegicus (Norway rat)
Rattus norvegicus
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                     1346 GICCAIGGGAAGCGCTACGACGTACAAGTICGACTICCACGGAATCGCCCAGGCCTCCAG 1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1466 TATCACGCCACCCACCAAAAAAAAAAAAATTTATGGCGCCCCACCCTCCAGCCCTCCCGTG 1525
AGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTC 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             353 ValHisGlyLygArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln
                                                                              LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identification of VESP14, a vascular endothelial cell specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus.
1 (bases 1 to 1808)
Aoki, T., Toyoda, H., Nishimoto, S., Tawara, J., Ukai, Y.,
Komurasaki, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .1808
/organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="taxon:10116"
/tisque type="liver"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="VESP14"
63. .1430
/gene="VESP14"
/note="similar to human erg1"
```

```
/codon_start=1
/prodon_start=1
/prodouc="wascular endothelial cell specific protein 14"
/protein_id="BABG2744.1"
/protein_id="BABG2744.1"
/db_xref="G1:15128489"
/db_xref="G1:15128489"
/db_xref="G1:BABGARVENGSENSPECAYGTPHLAKTEMTASSSSDYGQT
/kranelation="MASTIKEALSVVSKDQSLFECAYGTPHLAKTEMTASSSSDYGQT
SRMSPRYPCQOWLSQPPRAKUTIKMEGNPSQYNGSRNSPDECSVTKGGKWYGSPDTVGM
SYGSYMEEKHMPPPNMTTNERRVIVVPADPTLMSTDHVRQMLEFADVERLIDVDVLLF
QXIDGXELCKWTKDPRQRAKUTIKMEGNPADPTLMSTDDHVRQMLEFADVSRL
MARANTDLPYEPPRARTWTGHSHPTPGSKAAQPSETVPKTEDQRPQLDFYGILGPTS
SRLANPGGGIQLWQFLLELLSDSSNSNCITWEGTNGEFKWTDPDEVARRWGERKSKP
NGMYYTHPQKWMFVAPHPPALPVTSSSFFATPNPYWNSPTGGIVPNTRLPASHWPSH
LGTYY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnAsnileAspGlyivsGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                   CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu 40
                                                                                                                                                                                                                                                                                                                                                                                    ProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHisValArg 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAla 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             767
                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----AspleuProTyrGluGlnAlaArgArgSerAla
                                                                                                                                                                                                                                                                                                                                                                                                                              SerProAspAspCysSerValAlalysGlyGlyLysMetValSerSerSerAspAsnVal
                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                        (1-1808)
                                                                                                                                                                                                                                        US-09-902-772-2 (1-451) x AB031088
                                                                                                                                                                1.05e-143
2179.00
91.30%
88.26%
89.16%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACATCIG-
                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                        Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                              н
                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                          123
                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                   183
                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                87
                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                       Alignment Pred. No.:
                                                                                                                                                                  No.:
                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                       6 8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6 8
```

임

à

g

ò

8 ે

AB073079
Mus musculus Erg mRNA, mouse homolog of Human ets-related gene ERG, transcript variant 2, complete cds.
AB073079.1
GI:16197542 1127 1247 1307 1427 Direct Submission
Submitted (16-OCT-2001) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suchiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Pax:81-45-503-9170) 1007 1067 311 351 GlnBroHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrWetSer 391 411 947 331 827 271 887 291 Mus musculus (house mouse) Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus ValFroLysThrGluAspGlnArgProGlnLeuAspFroTyrGlnIleLeuGlyProThr and Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M. Sakaki,Y.
Mus musculus Erg mRNA
Published Only in Database (2001)
2 (bases 1 to 2133)
Ozawa,R., Noguchi,H., Taylor,T.D., Takeda,T., Hattori,M.. Sakaki,Y. /organism="Mus musculus" 372 828 252 ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 11 AB073079 LOCUS DEFINITION source REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL FEATURES 셤 g g ď δ g ð g ठ है ठ 엄 장염 के न के Db à 셤 ò

```
VRT 21-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1247 degalacectracectracadrireactrecaededarrececadecerecadececae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xenopus laevis erg gene (erg_A).
AJ224125
AJ224125
BRG gene; Lranscription factor.
Xenopus laevis (African clawed frog)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baltzinger,M., Mager-Heckel,A.M. and Remy,P. XI erg: expression pattern and overexpression during development plead for a role in endothelial cell differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1427 TCCAGITTCTTTGCTTCCCCGAACCCATACTGGAATTCACCGACTGGGGGCATCTACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1307 CCTCCTGAGTCGTCCCTGTACAAGTACCCCTCCGACCTGCCATACATGGGCTCCTATCAC
                                                                                                                                                                                                           -----ccrackackarcreateres
                                                                                                                                                                                                                                                            LeuAlaAsnProGlySerGlyGln1leGlnLeuTrpGlnPheLeuLeuGluLeuLeuSer
                                                                                                                                                                                                                                                                             AspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThr
                                                                                                                                                                                                                                                                                                                                   GACAGCTCCAACTCCAACTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACA
                                                                                                                                                                                                                                                                                                                                                                  AspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                 335 AsplysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLysValHis
                                                                                                                                                                                                                                                                                                                                                                                                                                1187 GACAAGCTCAGCCGCCCTCCGCTACTACGACAAAAACATCATGACCACGAGGTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   355 GlyLysArgTyralaTyrLysPheAspPheHisGlyIleAladInAlaLeuGlnPrOHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProproGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1367 GCCCACCCCCAGAAGATGAACTTTGTGTCTCCCCACCCTCCCGGTCTCCCAGTCAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrPro
                                                                             AGAAACACAGGGGGGCCCTTTTATTTTCCCAAATACTTCAGTATATCCGGAAGCTACG
                                                                                                        GlnArgileThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThr
                                                                                                                                                         SerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLys
                               --GlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1798 bp
(erg_A).
                                                                                                                           CAAAGAATTACAACTAGGCCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         375
                                                                                                                                                                                                                                                                                          1001
                                                                                                                                                                                                                                                                                                                                             1067
                                                                                    833
                                                                                                                                                               235
                                                                                                                                                                                                                                                                  275
                                                                                                                                                                                                                                                                                                                    295
                                                                                                                                                                                                                                                                                                                                                                      315
                                   773
                                                                                                            215
                                                                                                                                      893
                                                                                                                                                                                       914
          198
                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
XLAJ4125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                           8 S
                                                                                                                                                                                                                                                                                                                    8 G
                                                                                                                                                                                                                                                                                                                                                              8
                            g
                                                       જે
                                                                              ద
                                                                                                       $ 8 $
                                                                                                                                                                                엄
                                                                                                                                                                                                             \dot{\delta}
                                                                                                                                                                                                                                    g
                                                                                                                       Codon start=1

/db xref=1 id="BAB6949.1"

/db xref="d1:16197543"

/db xref="d1:16197543"

/translation="migrvpdppaaHIKEALSVVSEDQSLFECAYGTPHLAKTEMTASS
SPDYGGARSWGSPWPGGAPATTIKMECHNSEGNNSPDECKNWKGGKNVG
SPDYGMSYGSYMEEKTVPPPNMTTHERRYLYPADPTLMSTDHVRQMLEWAVKEGLID
BVDVLLFQNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDKAL
BVDVLLFQNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHLTSDDVDKAL
VLGSPRLANARNTGGAPETPPNTSYFEATQRITTREAAQESPSAVVETTREQRPQLDP
YQLLGFTSSRLANPGSGQIQLMQFLLELLSDSSNSWCITWRGTNGEFKMTDPDEVARR
WGERKSKPNNMYDKSARALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPPESSL
YKYPSILLPYMGSYHAHFQKNNFVSPHPPALLPVTSSSFFASPNPYWNSPTGGIYPNTRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                 gene (BRG), transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProkepaspCysSerValAlaLysGlyGlyLysMetValSerSerSerSepAsnValGly 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cengangagnecagnergaacaaaganegnegaaaganeenegagecageceganacnenegeg 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetAsnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrAsn 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluargargvalilevalProalaaspProThrLeuTrpSerThraspHisValArgGln 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                            232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnileAspGlyLysGluLeuCysLysMetThrLygAaspAspPheGlnArgLeuThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAsplleLeuLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATATCGATGGGAAGGAGCTGTGCAAGATGACAAAGGATGACTTCCAGCGGCTCACGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaserThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGCTCATATAAAGAGGCCTTGTCAGTTGTGAGCGAGGACCAGTCACTATTGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySexArgAsnSer
                                                                                                                                                                                                                                                                                                                    2133
403
12
13
49
                                                                                                   human ets-related
                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                             x AB073079 (1-2133)
/mol_type="mRNA"
/db_xref="taxon:10090"
/chromosome="16"
/clone="Erg-2"
                                                                                                    oţ
                                                     1. .2133
/gene="Erg"
149. .1540
/gene="Erg"
/note="homolog c
                                                                                                                                                                                                                                                                                                                       2.97e-142
2159.50
87.00%
84.49%
88.36%
                                                                                                                                                                                                                                                                     PASHMPSHLGTYY
                                                                                                                variant 2'
                                                                                                                                                                                                                                                                                                                                                                                                              US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                            Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 713
                                                                                                                                                                                                                                                                                                                        ..
No.:
                                                                                                                                                                                                                                                                                                            Alignment
                                                     gene
                                                                          CDS
                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원 상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

g $\dot{\sigma}$

ò

ò

1126

314

1006

1066

294

1186

334

1246

374

354

1366

394

1426

414

1486

```
GTACCTGCTGACCCTACTTTGTGAGCACAGATCATGTCAGACACAGGGCTAGAGTGGGCA 785
                                                                                                                                                                                                                     AlahrgargTrpGlyGluArgLy8SerLy8ProAsnMetAsnTyrAspLysLeuSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaLeuargTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1680 GCCCCTAATGCATACTGGAATTCACCAACTGGAAGTATTTATCCAAATACTCGGCTGCCA
                                  GluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSerTyrAsnAlaAsp
                                                                                                                                                                                                                                                                                 ---ccatcaaaagcatctcaacca---tctaccacagttcccaaaacagaagccccagg
                                                                                                                                                                                                                                                                                                                                                                                                          SerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACTGCATTACTTGGGAAGGAACCAATGGAGAATTTAAGATGACCGATCCCGATGAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAAGACGTTGGGGGGGGAGAGGAAAGCAAACCCAACATGAACTTGACAAGCTCAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380 MetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetasnPheValAlaProHisProProAlaLeuProValThrSerSerPhePheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620 ATGAACTTTGTTGCCCCCCATCCGCCAGCTTTACCTGTGACATCGTCAAGTTTCTTTGCA
                                                                                             ArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisPro
                                                                                                                                                                                                                                                                                                                ThrGlnSerLysAlaThrGlnProSerSerThrValProLysThrGluAspGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnCys11eThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlabroAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuPro
                                                                                                                                                                           187 IleLeuLeuSerHisLeuHisTyrLeuArgGluArg----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaAlaHisMetProSerHisLeuGlyThrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                        846
                                                                                                                                                                           199
                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                        1146
                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                           786
                                                                                  167
                                      147
              726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                           충염
                                                                                                                     8 8 8
                                                                                                                                                                                           g
                                                                                                                                                                                                                8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
              원 상 원
                                                                                                                                                                                                           jene="erg"
321. 1778

jene="erg"
1978

jene="erg"
jenetion="transcription factor"
| codon_start=1 | CAB46566.1"
| protein_id="CAB46566.1"
| db_xref="G1:5004:090700"
| db_xref="G0:5004:090700"
| db_xref="cod:2004:090700"
| db_xref="cod:2004:090700"
| canslation="WOHMAFIPTYEDYSNBALSVVSEDQSLFECTYGTPHLTKTEMTA|
$$$S$DYGQTEXMSPRYPOQDMISQPPSRVTIXMECNBSQVMGSRSSPDDCSIGKGSKM
GGGSDNVGANYGSYIEEKHISPPNMTTNBERRVIVPADPTLMSTDHVRQMLEWAIKEYG
                                                                                                                                                                                                                                                                                                                                                 LPDVDVLLFONIDGKELCKMYKEDFRALTPSYNADILLSHLHYLREYPLPHITSDVD
KALONSPRLMHARNTGGASFIFPNSSVYQDANQRIPSRQDLSYEPSRASAWTNHFAPP
SKASOPSTYVPKTEDPRPQLDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSSNSN
TYWEGTNGFFKYTDDDFVARRGERGSKPNANYDKLSRALRYYYDKNIMTKVHGKRY
AYKPDPHGIAQALQPPPESTMYKYPSELPYMSSYHAHPQKWNFVAPHPPALPVTSSS
FFAARNAYWNSPTGSIYPNTRLPASHMSSHLGTYY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAlaLysGlyGlyLysMetValSerSerAspAsnValGlyMetAsnTyrGlySer 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TyrMetGluGlutysHisIleProProProAsnMetThrThrAsnGluArgArgValIle 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGluTrpAla 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  366 GAAGCICTITICAGTGGTGAGTGAAGATCAGTGGTTATTCGAGTGCACTACGGAACGCCA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgValThr11e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAspCysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlualaLeuSerValValSerGluaspGlnSerLeuPheGluCysAlaTyrGlySerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisleuAlalyaThrGluMetThrAlaSerSerSerSerCluTyrGlyGlnThrSerLya
                                                                       UPR9005, MMDCD, Centre
15, RUE Rene Descartes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1798
399
21
23
29
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                              Location/Qualifiers
1. .1798
/organism="Xenopus laevis"
/mol_type="mRNA"
/db_xref="taxon:835s"
/clone="lambda ZAPII-erg A"
/clone lib="lambda ZAPII"
/dev stage="stage 30 embryo"
/...7798
                                 Clases 1 to 1798)
Baltzinger,M.
Direct Submission
Submitted (24-FEB-1998) Baltzinger M.,
National de la Recherche Scientiffque,
67084, FRANCE
 Dev. Dyn. 216 (4-5), 420-433 (1999)
20099678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1-1798)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2 (1-451) x XLAJ4125
                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.4e-142
2153.50
88.98%
84.53%
88.11%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                           10633861
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment :
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
   JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                      gene
                                                                                                                                                                                                                       CDS
                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 4 5 4 5 4 5 4 5 4 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                염
```

1199

239

1259

279

1319

299

319

1379

339

1439

359

1499

379

1559

1619

419

1739

```
1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     412
                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                       411
                                                                                                           101
                                                                                                                                                             471
                                                                                                                                                                                                                                                                                  531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                651
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------AspieuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGTTAATGCATGCCAGAAACACAGATTTACCTTATGAGCCTCCCAGGAGATCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrSerHisSerHisProThr -- GlnSerLysAlaThrGlnProSerSerThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCGCCTIGCTAATCCAGGTAGTGGCCAGATCCAGCTGTGGCAGTTCCTGCTCGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGCACGGGAAGCGCTACGCCTACAAGTTTGACTTCCACGGGATTGCCCAGGCCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrserserserPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle
                              GCCAGGGTCACCATCAAGATGGAGTGCAACCCTAGTCAGGTGAATGGTTCCAGGAACTCA
                                                                                                           ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly
                                                                                                                                                    CCTGATGAGTGCAGTGTGAACAAAGTGGGGAAGATGGTGGGCCAGCCCGGATACTGTGGGG
                                                                                                                                                                                                                                                                                                                                         GluargargvalilevalProalaaspProThrLeuTrpSerThrAspHisValArgGln
                                                                                                                                                                                                                                                                                                                                                                              AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspAspHeGlnArgLeuThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATATCGATGGGAAGGAGCTGTGCAAGATGACAAAGGATGACTTCCAGCGGCTCACGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ::: |||||| | |||||| CATCTG-----GATGACGTTGATAAGGCTTTACAAACTCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u> Accesccacadecercadecercadarecadadecreacecercadecercadas acceses acce</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProlysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1057 crercadacaderecaaerecaaerecareaeeregaaggeaeeaeeaaeggaagrecaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetThraspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnIyrAspLysLeuSerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal
                                                                                                                                                                                                                              MetasnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TrpleuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGln
   AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1237
                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                       532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1357
   62
                                                       352
                                                                                                                  82
                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             413
                                           셤
                                                                                                           ઠે
                                                                                                                                                    ద
                                                                                                                                                                                                        8688
                                                                                                                                                                                                                                                                                                                                                                                                                                                     중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                           Sakaki, Y.
Sakaki, Y.
Mus musculus Erg mRNA

AL Published Only in Database (2001)

Sakaki, Y.
Sakaki, Y.

Sakaki, Y.

Submitted (16-OCT-2001) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);

1.7-22 Suchiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattorieges riken:go.jp, UKL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 2131
1. 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LONS PELMERANTDE PYERPERANGEMENT TRANSPERSENDEN BELLED STRANGE SEAVER BOORPOLDEY OLLGPTS SRLANFRENDORPOLDEY OLLGPTS SRLANFRENDE BOORPOLDEY OLLGPTS SRLANFRENDE BOORPOLDEY OLLGPTS SRLANFRENDE BOORPOLDEY OLLGPTS SRLANFRENDE BOORPOLDE SKRYPOLDE SKRYPOLD SKRYPOLDE SKRYPOLD SKRYPOLDE SKRYPOLDE SKRYPOLDE SKRYPOLD 
   AB073078 2131 bp mRNA linear ROD 17-OCT-2001 MLX musculus Erg mRNA, mouse homolog of Human ets-related gene ERG, transcript variant 1, complete cds.
AB073078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    351
                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2131
402
16
27
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/chromesome="16"
/clone="Erg-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-2131)
                                                                                                                                                                   Mus musculus (house mouse)
Mus musculus
                                                                                                                     AB073078.1 GI:16191716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x AB073078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.17e-141
2151.00
91.07*
87.58*
88.01*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
Score:
   LOCUS
                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DRIGIN
```

g

 δ

g ò

 $\dot{\delta}$

217

520 237 256 640 276 700 296

460

197

à 원

```
22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Luyten,F., de Bari,C. and Dell'Accio,F.
Polymicleotide sequences and vectors useful for the prevention
treatment of bone- or cartilage-related disorders
Patent: WO 03000724-A 7 03-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 941 GGCTACGCCTACAAGTTCGACTTCCAGGGATCGCCCAGGCCCTCCAGCCCCACCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgGlyAlaThrPheIlePheBroAsnThrSerValTyrProGluAlaThrGlnArgIle
                                                                                                                 ThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSer
                                                                                                                                    ACAACTAGGCCAGAITTACCATATGAGCCCCCCAGGAGATCAGCCTGGACTGGTCACGGC
                                                                                                                                                                                                                                                                                                      AArccaggcagractcagarccagcrrrggcagractccrgaagcrccrggacagc
                                                                                                                                                                                                                                                                                                                                     SerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspPro
                                                                                                                                                                                                                                                                                                                                                        TCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCC
                                                                                                                                                                                                                                                                                                                                                                                              AspGluValAlaArgArgTrpGlyGluArgLy8SerLy8ProAspMetAsnTyrAspLy8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProGlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phe Phe Ala Ala ProAsn ProTyrTrp Asn Ser ProThrGlyGlyIle Tyr ProAsn Thr
              ArgleuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGlu
                          HisProThr -- GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGlu
                                                                                                                                                                                                581 CACCCCACGCCCCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAA
                                                                                                                                                                                                                                                                                   AsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                        821 GACGAGGIGGCCCGGCGCIGGGGAGGGGGAAGGAGCAAACCCAACAIGAACIACGAIAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX657234 1372 bp
Sequence 7 from Patent WO03000724.
AX657234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX657234.1 GI:29160012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           417
                                     401
                                                                                          461
                                                                                                                                               521
                                                                                                                                                                            238
                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                   277
                                                                                                                                                                                                                                                                                                               701
                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                                                                                                                                                                                    761
                                                                                                                                                                                                                                                                                                                                                                                               317
                                                                                                                                                                                                                                                                                                                                                                                                                                                       337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     397
              178
                                                                 198
                                                                                                                      218
                                                                                                                                                                                                                               257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
AX657234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      연
                                                                                                                                                                                                                                                     8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                장염
                                                       8 B 8
                                                                                                                                    음 중 음
                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     /pooden_id="CAD79712.1"
/db_xref="Id1:21460109"
/db_xref="Id1:21460109"
/db_xref="Id1:221460109"
/db_xref="Id1:221460109"
/translation="WNGSPDTVGMNYGSYMEEKHMPPPNMTTNERRVIVPADPTLWSTDHYROWILEBAAYKEYGLPDVNJLLFQRYDDFCWTXDDFGRATPSPRADILLSHLHY
IRRGAAFIFPNTSYYDEATORITTRPDLPYEPRSAMTGHPPPOSKAAQPSPST
VPKTEDROFQLDPYQTLGPTSSRLANPGSGQIQLWQPLLELLSDSSNSSCITWEGTNG
REYMTPDPDSYARWGERKSKPNNNYDKLSRALRYYDXNIMTVHGKRYAYRRPTHG
AQALQPHPPESSLYKYEPSDLPYMGSYTAHPQKWNFVAPHPPALPVTSSSFFAAPNPYM
NSPTGGIYPNTRLPTSHMPSHLGTY"
                1476
                                                                                                                      22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisvalArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIle 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAsp 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rchaddaacrcrccrdardaardcaardraccaaadccaaaadardardaadaacaa 160
                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                         O.
                                                                 1533
                                        451
                                                                                                                                                                                                                                                         Luyten,F., de Bari,C. and Dell'Accio,F.
Polymuclectide sequences and vectors useful for the prevention treatment of bone- or cartilage-related disorders
Patent: WO 03100724-A 3 03-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuLeuPheGlnAsn11eAspGlyLysGluLeuCysLysMetThrLysAspAspPheGln
1417 ACATCTTCCAGTTTCTTTGCTTCCCCGAACCCATACTGGAATTCACCGACTGGGGGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerArgAsnSerProAspAspCysSerValAlaLysGlyGlyGlyBysMetValSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspAsnValGlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProPsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGTGCGGCAGTGGCTGGAGTGGGCGGTGAAAGAATATGGCCTTCCAGACGTCAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT
                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1291
356
6
12
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                              /note="unnamed protein product"
/codon_start=1
                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                         1. .1291
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
146. .1228
                                                                                                                    AX657230 1291 bp
Sequence 3 from Patent W003000724.
AX657230
AX657230.1 GI:29160008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-1291)
                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x AX657230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.35e-128
1955.50
96.53%
94.93%
80.01%
                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                          RESULT 14
AX657230
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
```

1120

1060

396

416

1000

356 940 376

336 880

760 316 820 1180

ò 염 8 8

8 8 8 8

ö

```
198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGCCTGGACCGGTCACGCCCACGCCCCAGTCGAAAGCTGCTCAACCATCTCCT 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerThrvalProtysThrGluAspGlnArgProGlnLeuAspProTyrGln1]eLeuGly 269
                                                                                                                                                                                                                                                                                                                                                                                                                117
                                                                                                                                                                                                                                                                                                                                                                                                                          GACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACATGCCACCCCCAAAC 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccreaagcracecaaagaarracaacrageccagarrraccarargaeccccccaggaga 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerAlaTrpThrSerHisSerHisProThr --- GlnSerLysAlaThrGlnProSerSer 249
                                                                                                                                                                                                                                                                                                                                                                                        rcaaggaacrerecreareaarecagrereceaaaggeggaagargeregegege 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetThrThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAsp 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIle 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgleuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGlu 197
                                                                                                                                                                                                                                                                                                                                                                 SerArgAsnSerProAspAspCysSerValAlaLysGlyGlyGlyDysMetValSerSer 97
                                                                                                                                                                                                                                                                                                                                                                                                              AspAsnValG1yMetAsnTyrG1ySerTyrMetG1uG1uLysHis1leProProPsnAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221 ATGACCACGAACGAGGGCAGAGTTATCGTGCCAGCAGATCCTACGCTAGGAGTACAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuLeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               --------GlyAlaThrPheilePheProAsnThrSerValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProGluAlaThrGlnArgIleThrThrArgProAspLeuProTyrGluGlnAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGTGCGGCAGTGGCTGGAGTGGGGGGGGTGAAAAAATATGGCCTTCCAGACGTCAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198 Arg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461 ACTCCTCCTCCACATTTGACTTCAGATGATGTTGATAAAGCCTTACAAAACTCTCCACGG
                                                                                                                                                                                                                                                         1372
355
6 13
13
28
                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                 146. .1309
/note="unnamed protein product"
       Location/Qualifiers
1. 1372
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
146. 1309
                                                                                                                                                                                                                                                                                                                                           US-09-902-772-2 (1-451) x AX657234 (1-1372)
                                                                                                                                                                                                                                                          4.23e-126
1926.00
89.80%
88.31%
78.81%
Tigenix N.V.
                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                 78
                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                                                                                              118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              250
                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                 9
8
                                                                                                                                                                                                                                                             ..
0
          FEATURES
                                                                   CDS
                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                        \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                 ò
```

Search completed: May 27, 2004, 22:55:53 Job time : 5643 secs

Nucleotid Human FLI Human FLI Human Hum

Title: Perfect score: Sequence:

OM protein

е ::

Run

Scoring table:

Searched:

```
Chicken; C-11 protein; cell calcification inhibiting activity; cell calcification inhibiting agent; c-erg protein; arthritis deformans; ossification; spinal column ligament; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aai06643 Probe # Abs14215 Human g Aba14812 Human g Aba50128 Human b Aba50193 Human b Aba35152 Probe # Aak4265 Human b Ab41867 Human b Aba108696 Probe # Adb72428 Human F Ada02697 Mouse F Adb72425 Mouse F
                                                                 Aaq50644
Abv94334
Abv94334
Ada02691
Ada02689
Ada02689
Ada0268
Ada0268
Ada0268
Ada0268
Ada0268
Ada0268
Ada0268
Ada0263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                               ABX 84139
ADA 02691
ADA 02689
ADB 02689
ADB 02689
ADB 02689
AAH 02915
AAH 02915
AAH 02915
AAH 66106
AAK 1426
AA
ABZ68768
ADA02692
ADB72430
AAQ50644
ABV94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
63. .1418
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding chicken C-11 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-00878177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX26551 standard; DNA; 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98JP-00166076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHUGAI PHARM CO LTD.
UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
11829

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12020

12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73725
  14-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP11075871-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-MAR-1999
1807.5
16224.5
16224.5
16224.5
16224.5
16224.5
1623.5
1613.5
1613.5
1613.5
1613.5
1613.5
1613.5
1613.5
1613.5
1613.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gallus sp
                                                                                                                                                                                                                                                                                                                                                         AAX26551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CHUS )
(UYPE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX26551
     0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Command line parameters:
-MODEL=frame+ p2n.model - DEV=xlh
-Q=/Cgn2_1/USFTO_epool/US9902772/runat_27052004_162840_2136/app_query.fasta_1.647
-Q=/Cgn2_1/USFTO_epool/US9902772/runat_27052004_162840_2136/app_query.fasta_1.647
-Q=/Cgn2_1/USFTO_epool/US9902772/runat_27052004_162840_2136/app_query.fasta_1.647
-LOOPEXT=0 -UNITS=bits -START=1 - END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 - DOCALIGN=200 - THR SCORE=pct - THR MAX=100 - THR MIN=0 - ALIGN=15
-LOOPEXT=0 -UNITS=200 - THR SCORES=0 - THR SCORES=0 - MINLEN=0 - MAXIEN=200000000
-USER=US09902772_@CGN 1 1 470 @runat_27052004_162840_2136 - NGPU=6 - ICFU=3
-NO MAAP - LARGEQUERS - NGG SCORES=0 - WAIT - DSPBLOCK=100 - LONGIOG
- FGAPEXT=7 - YGAPOP=10 - YGAPEXT=0.5 - DELOP=6 - DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA encod
DNA encod
Nucleotid
Anglogene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lung canc
Prostate
Nucleotid
Nucleotid
                                                                                                                                                                 // Search time 610 Seconds
(without alignments)
3140.881 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aax26551 D
Aax26552 D
Abz68766 N
Abx08759 A
Abx76295 L
Adb75274 P
Abz68767 N
                                                                                                                                                                                                                                                                                                            .....IYPNTRLPAAHMPSHLGTYY
                           version 5.1.6 - 2004 Compugen Ltd.
                                                                                                                      nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fotal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3373863 segs, 2124099041 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                   0.07
0.05
0.05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX26551
AAX26552
ABZ68766
ABX08759
ABX76295
ADB75274
ABZ68767
                                                                                                                                                                                                                                                            US-09-902-772-2
2444
1 MASTIKEALSVVSEDQSLFE.
                                                                                                                                                                                                                                                                                                                                                                              Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                    May 27, 2004, 19:25:13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genesequ2001bs: *
genesequ2002s: *
genesequ2003as: *
genesequ2003bs: *
genesequ2003bs: *
                           GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  geneseqn2000s:*
geneseqn2001as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N. Geneseq_29Jan04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    geneseqn2004s:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>B</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11528
11389
11389
3166
11291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                              BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..01
```

Jatabase

24144 2327.5 2327.5 2182 2182 2182 1955.5

450000

Score

Result No.

Human liv Probe #66 Human gen Human foe Probe #17 Human bre

Breast ca Human FLI Human FLI Mouse FLI Mouse FLI Mouse FLI Mouse FLI Human She Human Hum DNA encod Probe #10 Human foe Probe #10 Human foe Probe #14 Human bre Human bre Human bre Human bre Human bre

Score:

ò 임 g à 9 ò

ò

```
1022
                                                                                                                                                                                                                                                                                                               CIICGCIACIACIAIGACAAAAAATAITAIGACIAAAGIICAIGGIAAACGIAIGCCIAC
                                                                                                                                                                                                                                                       340
                                                                           280
                                                                                                                                                                              CysileThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePheAlaAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACTITGIAGGCCCCCCTGCTGCTTTGCCCGTAACCTCATCCAGCTTTTTTGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProgsnProTyrTrpAsnSerProThrGlyGlylleTyrProAsnThrArgLeuProAla
                                                                                          GlyGln1leGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSerAsnSerAsn
                                                                                                                                              ArgArgTrpG1yG1uArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAla
                                                                                                                                                                                                                                                                                      Leuargryrryrrasplysasnilemetrhriysvaltisglytysargryralaryr
                                                                                                                                                                                                                                                                                                                                          LyspheasppheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerWet
                                                                                                                                                                                                                                                                                                                                                                                             TyriysTyrProSerAspleuProTyrMetSerSerTyrHisAlaHisProGlnLysMet
CCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACGAGTCACAGCCATCCCACT
                         GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgPro
                                          GlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chicken, C-11 protein, cell calcification inhibiting activity, cell calcification inhibiting agent, c-erg protein, arthritis ossification, spinal column ligament, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTCATATGCCTTCCCATCTTGGCACCTACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
63. .1499
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding chicken c-erg protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98JP-00166076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00878177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX26552 standard; DNA; 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP11075871-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-MAR-1999
                                                                                                                                                                                                                963 '
                                                                                                                                                                                                                                                                    1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1383
                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                        1083
                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                                                                                                                                        401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX26552,
                                                                                                                                    281
     723
                                                        783
                                                                                 261
                                                                                                         843
                                                                                                                                                            903
                                                                                                                                                                                      301
                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                      જે
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                         상 웜
                                                                                                                             ð
                                                                                                                                                         ద
                                                                                                                                                                                     8
                                                                                                                                                                                                                                      ઠ
                             ð
                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAla 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgileThrThrArg 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAACATTGATGGGAAAGAGTTGTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCACG 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                           deformans
                                                                                                                    The present sequence encodes a chicken C-11 protein which has cell calcification inhibiting activity. The specification also describes a cell calcification inhibiting agent containing c-erg protein (AAYO1521). The proteins are used for measuring the calcification of a cell, for diagnosing arthritis deformans or ossification of spinal column ligament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>ACTITITATITITICCAAATACATCAGTITIACCCAGAAGCAACGCAAAGAATAACAACAAGG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnasnileaspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrdlyglnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAlaArgValThr11eLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcaccreargacrecageeraaaagaagagaaaarggrragcagrrcagacaargrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGATGAACTATGGAAGCTACATGGAAGAGAAGCATATTCCGCCTCCAAATATGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHisValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rereccracearcecececercrrecaaeaeaeaaaareacaecrecrecrecaereaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cagrescresasgresscasgresasgasgrandsricciasaceresacarcricirerro
                                                                                                                                                                                                                                                                                                                                                                  MetalaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                   CysAlaTyrGlySerProHisteuAlaLysThrGluMetThrAlaSerSerSerGlu
                                           An active protein for inhibiting cell calcification - useful for measuring the calcification of a cell, for diagnosing arthritis or ossification of spinal column ligament.
                                                                                                                                                                                                     Sequence 1447 BP; 440 A; 374 C; 317 G; 316 T; 0 U; 0 Other;
                                                                                                                                                                                                                                           1447
451
0
0
0
                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                       (1-1447)
                                                                                                  Disclosure; Page 7-8; 15pp; Japanese
                                                                                                                                                                                                                                                                                                                                         US-09-902-772-2 (1-451) x AAX26551
                                                                                                                                                                                                                                            2.01e-199
2444.00
100.00%
100.00%
         WPI; 1999-257708/22.
P-PSDB; AAY01520.
                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                 Best Local Si
Query Match:
DB:
```

셤

8 B 8

g

8 8 8

qq

장 õ a

 $\dot{\delta}$

à

1382

440

1202

400

380

1262

1322

```
1082
                                                                                                                                                                                                                                                                                                                                      1142
                                                                                                                                                                                                                                                                                                                                                                                                                                 1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARGCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCCTGCTTTGCCCGTAACC 1382
                                                                                                                                                                                                                                                                                                                                                                             1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                        393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  433
                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                 333
                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                        782
                                                                                 233
                                                                                                      842
                                                                                                                            253
                                                                                                                                                  902
                                                                                                                                                                        273
                                                                                                                                                                                               962
                                                                                                                                                                                                                       293
             722
                                    213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValPro
                                                                                                                                               ACGAGTCACAGCCATCCCACTCAGTCAAAAGCTACCCAACCATCATCTTCAACAGTGCCC
                                                                                                                                                                                    SerAspSerSerAsnSerAsnCyslleThrTrpGluGlyThrAsnGlyGluPhelysMet
                                                                                                                                                                                                                                                                                 1023 TCGGACAGCTCCAACTCCCAACTGCATCACCTGGGAGGGCACAAATGGGAGAGTTCAAGATG
                                                                                                                                                                                                                                                                                                                  ThrasperoaspoluvalalaargargTrpGlyGluargLysSerLysProAsnMetAsn
                                                                                                                                                                                                                                                                                                                              334 TyrasplysleuSerargalaleuargTyrTyrAsplysAsnIleMetThrLysVal
                                                                                                                                                                                                                                                                                                                                                                                                           354 HisGlyLyshrgTyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                       1203 CATGGTAAACGCTACAAAATTTGATTTCCACGGAATCGCTCAGGCCTCCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisProProGluSerSerWetTyrlysTyrProSerAspLeuProTyrMetSerSerTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr
                                                        GCTAGAAACACAGGAGGGAGCCACTTTTATTTTTTCCAAATACATCAGTTTACCCAGAAGCA
                                                                                 ThrGlnArg1leThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                             ACGCAAAGAATAACAACACCAGATTTACCTTATGAGCAAGGGAGGAGATCAGCGTGG
                                                                                                                                                                         LysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSer
             CCACATTTGACTTCAGATGATGATGATAAGGCCTTACAAAACTCTCCACGGTTAATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; splice variant; ERG; Ets; transcription factor; C-1-1; C-1-2;
C-1-3; C-1-4; chondrocyte; articular chondrocyte; bone disease;
cartilage disease; tumour; gene; 8s.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAATACCAGCTGCCAGCTGCTCTATGCCTTCCCATCTTGGCACCTACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       splice variant C-1-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleotide sequence of human ERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; DNA; 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                             374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ68766
                                                                                                           783
                                                                                                                                                                                                                           274
                                                                                                                                                                                                                                                  963
                                                                                                                                                                                                                                                                         294
                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ68766
                                                                                    214
                                                                                                                                 234
                                                                                                                                                       843
                                                                                                                                                                              254
                                                                                                                                                                                                    903
                   663
                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ОШОН
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ68766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 6 6 6
                                                                                                                                                                                                                                                                                                                 B 55 B 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                            õ
             g
                                    ठ व ठ
                                                                                                       a
                                                                                                                              8
                                                                                                                                                 ДC
                                                                                                                                                                           8 8
                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                           242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                  deformans
                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                       The present sequence encodes a chicken c-erg protein. The specification also describes a chicken C-11 protein (AAY01520) which has cell calcification inhibiting activity and a cell calcification inhibiting agent containing c-erg protein. The proteins are used for measuring the calcification of a cell, for diagnosing arthritis deformans or ossification of spinal column ligament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GINTRDLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ASIGIUALGALGVAIIIEVAIPLOALASPPROTHILEUILDSELTHIASPHISVALALG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArg----
                                                                                                                                                                                                                                                                                                                                                                                             ProblaArgValThrIleLy8MetGluCysAenProAenGlnValAsnGlySerArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                            CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrglyglnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro
                                                                                    An active protein for inhibiting cell calcification - useful for measuring the calcification of a cell, for diagnosing arthritis or ossification of spinal column ligament.
                                                                                                                                                                                                                                       Sequence 1528 BP; 464 A; 395 C; 330 G; 339 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                         US-09-902-772-2 (1-451) x AAX26552 (1-1528)
                                                                                                                                    Disclosure; Page 8-9; 15pp; Japanese
                                                                                                                                                                                                                                                                            7.26e-197
2414.50
94.14%
94.14%
98.79%
97US-0050297P
                    CHUGAI PHARM CO LTD.
UNIV PENNSYLVANIA.
                                                        WPI; 1999-257708/22
                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                  P-PSDB; AAY01521
20-JUN-1997;
                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                               21
                      (CHUS )
(UYPE-)
                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
```

8 8 8

g ठे

g &

a

8 8

 δ d 8 8 8

원 상 원

ઠ

121

CCTGATGAATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCAGCCACAACACCGTTGGG

GluargargVallleValProAlaAspProThrLeuTrpSerThrAspHisValArgGln GAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAG

MetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrThrAsn

102 391 122

331

TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGln 161

AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro 571 AACATCGATGGGGAAGGAACTGTGCAAGATCAACGACGACGACTTCCAGAGGCTCACCCC SeriyrAsnAlaAspileLeuLeuSerHisteuHisTyrLeuArgGluArgGlyAlaThr PhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArgPro

162

451

142 511 531

182

202 691

```
q
                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                    셤
                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                  8
                                                                                                                              셤
                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                            The present sequence encodes splice variant C-1-1 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the B1 bp fragment, and the presence of the 218 bp fragments of the ERG-3 cDNA sequence); C-1-2 (characterised by the absence of the B1 bp and 218 bp ragments, and the presence of the 72 bp fragment of the ERG-3 cDNA sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and 218 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 72 bp, 81 bp and 218 bp fragments of the ERG-3 cDNA sequence); and the presence of the 72 bp and 81 bp fragments of the ERG-3 cDNA sequence). The splice variant bp fragments of the ERG-3 cDNA sequence). The splice variant collides are useful for stabilizing the phenotype of chondrocytes of differentiation of articular chondrocytes during in vitro culture expansion, for preventing or treating bone-related or cartilage-related encodacytes. Progenitor cells of stable chondrocytes (ells expressing the progenitor cells of stable chondrocytes. Cells expressing the progenitor cells are useful for producing or repairing cartilage tissue in
                                                                                                                                                                                                                                                                                   Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1509 BP; 389 A; 472 C; 359 G; 289 T; 0 U; 0 Other;
67. .1446
/*tag= a
/product= "ERG splice variant C-1-1"
                                                                                                                                                                                                                Dell'accio F;
                                                                                                                                                                                                                                                                                                                                                     Claim 9; Fig 4; 60pp; English
                                                                                                                       08-MAR-2002; 2002WO-EP002605
                                                                                                                                                     25-JUN-2001; 2001US-0300756P
                                                                                                                                                                                                                υ
                                                                                                                                                                                                                                             WPI; 2003-221398/21
P-PSDB; ABP97695.
                                                                                                                                                                                                                De Bari
                                                                                                                                                                                 (TIGE-) TIGENIX
                                                            WO2003000724-A2
                                                                                                                                                                                                                Luyten F,
CDS
```

750

630 201 9 221

181

GGACAGACTTCCAAGATGAGGCCACGCTCCTCAGCAGGATTGGCTGTCTCAACCCCCA 270 150 ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly 101 61 AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer 81 2 41 AlaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys 91 GCAGCTCATÀTCAAGAAGCCTTATCAGTTGTGAGGAGGACCAGTCGTTGTTTGAGTGT AlaryrdlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro 1509 100 1309 130 Length: Matches: Conservative: Mismatches: Indels: Gaps: US-09-902-772-2 (1-451) x ABZ68766 (1-1509) 1.99e-189 2327.50 96.90% 94.68% 95.23% Percent Similarity:
Best Local Similarity:
Query Match:
DB: Scores: N 22 42 211 271 82 151 62 .. 0 Alignment Pred. No.:

g

ઠે g à

à

g

g

ò

ò

B ઠે 요 8

8

8

	222	AspleuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr	240
	751	GATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACGGGTCACGGCCACCCCCC	810
	241	GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgPro	260
	811	CAGTCGAAAGCTGCTCAACCATCCTTCCACAGTGCCCAAAACTGAAGACCAGCGTCCT	. 078
	261	GlnLeuAspProTyrGln1leLeuGlyProThrSerSerArgLeuAlaAsnProGlySer	280
	871	CAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAATCCAGGCAGT	930
	281	GlyGlnIleGlnLeuTrpGlnPheleuLeuGluLeuLeuSerAspSerAsnSerAsnSerAsn	300
	931	GGCCAGATCCAGCTTTGGCAGTTCCTCTGGAGCTCCTGTCGGACAGCTCCAACTCCAGC	066
	301	CyslleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla	320
	991	TGCATCACCTGGGAAGGCACCAACGGGAGTTCAAGATGACGGATCCCGACGAGGGGGCCC	1050
	321		340
	1051	CGGCGCTGGGGAGAGGGGAAACCCAACATGAACTACGATAAGCTCAGCCGCGC	1110
	341		360
	1111	CICCGITACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGGGCTACGCTAC	1170
	361		380
	1171	AGITCGACITCCACGGGATCGCCCAGGCCTCCAGCCCCCCCCCC	1230
	381		400
i	1231	TACAAGTACCCCTCAGACCTCCGTACATGGGCTCCTATCACGCCCCACCCA	1290
	401		420
	1291	AACTITGIGGGGCCCCACCCTCCAGCCTCCCGGACATCTTCCAGTTTTTTGCTGCC	1350
	421		440
	1351		1410
	441	AlaHisMetProSerHisLeuGlyThrTyrTyr 451	

g

ઠે 임

```
The present invention relates to methods and compositions for detecting an angiogenesis-associated transcript in a cell in a patient. The method involves contexting a biological sample from the patient with a polymucleotide that selectively bybridises to a sequence at least 80% identical to any of the angiogenesis-associated human polymucleotide sequences given in the specification. These angiogenesis associated polymucleotide sequences comprise genes that exhibit changes in sequences to method and the polymucleotide sequences of the invention are useful for disgnosing and treating angiogenesis and angiogenesis and angiogenesis and angiogenesis and cangiogenesis are also useful in the gene therapy of such disorders. The sequences are also useful in the gene therapy of such disorders. The angiogenesis-associated proteins encoded by the polymucleotide sequences are useful as a vaccine for therapeutic and prophylactic immunisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Detecting angiogenesia-associated transcript in a cell for diagnosing and treating cancer by contacting a sample with a polynucleotide that exhibits changes in expression level as a function of time in tissue
                                                                                                                                                                                                       Human, angiogenesis-associated transcript, angiogenesis, angiogenesis-associated disease, cancer; cytostatic; gene therapy; gene,
                                                                                                                                                                         Angiogenesis-associated human polynucleotide sequence #21.
1411 AGCCATATGCCTTCTCATCTGGGCACTTACTAC 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Watson SR, Aziz N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 200; 291pp; English.
                                                                 ABX08759 standard; cDNA; 1389 BP
                                                                                                                                                                                                                                                                                                                                                                                                                14-FEB-2001; 2001US-00764356.
22-FEB-2001; 2001US-00791390.
19-ART-2001; 2001US-0285475P.
03-AUG-2001; 2001US-0310025P.
13-NOV-2001; 2001US-0350666P.
29-NOV-2001; 2001US-035044P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EOSB-) EOS BIOTECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                  14-FEB-2002; 2002WO-US004915.
                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       undergoing anglogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glynne R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-040681/03.
P-PSDB; ABU03476.
                                                                                                                                                                                                                                                                                                                WO200279492-A2.
                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                     21-JAN-2003
                                                                                                                                                                                                                                                                                                                                                  10-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murray R,
                                                                                                     ABX08759:
                                                    ABX08759
                                 RESULT
```

sednences

Sequence 1389 BP; 359 A; 440 C; 323 G; 267 T; 0 U; 0 Other;

	m	407	7.4	24	14	4	
	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:	
	۰.	픕	. 72	ф.	9.28	7	
Alignment Scores:	Pred. No.:	core:	Percent Similarity:	est Loca	Query Match:	DB;	

```
US-09-902-772-2 (1-451) x ABX08759 (1-1389)
```

	2 AlaserThrilelysGlualaLeuSerValValSerGluAspGluSerLeuPheGluCys 215 CCACGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG
8 & B	790 CCCAAAACIGAAGACCAGCGICCICAGIIAGAICCIIAICAGAIICIIGGACCAACAAGI 849 273 SerArgieuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292 6.0 ACCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
6 6	253 ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer 272
9 6	790 CCCAAAACTGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAGT 849 273 SerardienalaasnProGlySerglyGlyTleGln[en]TrnGlnPhelenGln[en] 292
ć	273 SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnFheLeuLeuGluLeu 292
සු ද	273 SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292
5 A	850 AGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGGCTTTGGCAGTTCCTCCTGGAGGTC 909
an .	850 AGCCCCTTCCAAATCCAGGCAGTGGCAAATCCAAGCTTTGGCAGTTCCTCCTCCTGGGGCTC 303
් දුරු	293 LeuSeraspSerSerasnSerasnCysIleThrTrpGluGlyThrAsnGlyGluPhelys 312
3 .	10 C16 C16 C16 C17
දු දු	313 MetThraspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet 332
}	333 ASHTYRASDLYSLeuSerArgalaLeuArgTyrTyrTyrAsDLysAsDlleMetThrLys 352
a a	1030 ACTACGATAAGCTCAGCCGCGCCCTCCGTTACTACTAGACAACATCATGACCAAG 1089

ø

58

May

Fri

```
1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a method for detecting a lung cancer-associated transcript in a cell from a patient, comprising contacting a biological sample from the patient with a polynucleotide that selectively hybridises to a sequence that is at least 80 % identical to a gene that exhibits increased or decreased expression in lung cancer samples. Lung cancer-associated polynucleotides and polypeptides are used for identifying a compound that modulates a lung cancer-associated polypeptide, for inhibiting proliferation of a lung cancer-associated cell to treat lung
                                                                                                                                                                                                                              TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412
                                                                                                                                                                                                                                                                                                                                                                                    ACAICTICCAGITITITITITICICCCCAAACCCAIACIGGAATICACCAACTGGGGGTATA 1329
                               Lung cancer-associated polynucleotide, gene, ds, cytostatic, emphysema, antiinflammatory, antiasthmatic, non-small cell lung cancer, atelectasis, small cell lung cancer, benign lesion, precancerous lesion, bronchitis, chronic obstructive pulmonary disease, hypersenaitivity pneumonitis, interstitial pulmonary fibrosis; fibrosis, asthma, bronchiectasis.
                                                                                                                392
                                                                                                                                                                                                                                                                                                                                               ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGly11e 432
372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACCCCAACACTAGGCTCCCCACCAGCATATGCCTTCTCATCTGGGCACTTACTAC 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detecting a lung cancer-associated transcript in a cell from a patient for treating lung cancer, by contacting a biological sample from the patient with a polynucleotide that exhibits increased or decreased expression in lung cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      451
                                                                                                                                                CCCCACCCCCGGAGTCATCTCTGTACAAGTACCCTCAGACCTCCCGTACATGAGGCTCC
                                                                                                                   ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSer
ValHisGlyLysArgTyrLysPheAspPheHisGly1leAlaGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer-associated polynucleotide #159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 22; Page 310-311; 453pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-APR-2001; 2001US-0284770P.
10-MAY-2001; 2001US-0290492P.
09-NOV-2001; 2001US-0339245P.
13-NOV-2001; 2001US-0350666P.
29-NOV-2001; 2001US-0334370P.
12-APR-2002; 2002US-037246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABX76295 standard; DNA; 3166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-APR-2002; 2002WO-US012476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-093161/08.
P-PSDB; ABUS6566.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murray R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200286443-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1330
                                                                                                                                                                                                                                                                                             1210
                                                           1090
                                                                                                                                                                            1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX76295
                                                                                                                       373
                                                                                                                                                                                                                                       393
                                                                                                                                                                                                                                                                                                                                                        413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ż
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aziz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABSULT 5

ABX76295

ABX76295

ABX76295

ABX76295

ABX76

ABX76

ABX76

ABX76

ABX77

ABX76

ABX77

ABX76

ABX76

ABX77

ABX76

ABX77

ABY76

ABY776

ABY76

ABY76

ABY76

ABY776

ABY776

ABY776

ABY776

ABY776

ABY776

ABY776

ABY776

                                                        원
                                                                                                                   ò
                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                              8 6 6
```

```
982
deministering a modulatory compound identified. The methods are useful for treating a modulatory compound identified. The methods are useful for treating lung cancer, such as small cell lung cancer, non-small cell lung cancer or other benign or precancerous lesions, e.g. atelectasis, emphysema, bronchitis, chronic obstructive pulmonary disease, fibrosis, hypersensitivity pneumonitis, interstitial pulmonary fibrosis, asthma and bronchiectasis. The genes, polyvaclocides and polypeptides are useful for diagnostic purposes and as targets for screening for therapeutic compounds that modulate lung cancer, such as antibodies. Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     252
                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                   700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATTIG------ACTICA-----GAIGAIGTIGAIAAAGCCITACAAACICTICCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----AspLeuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGTTAATGCATGCTAGAAACACACAGATTTACCATATGAGCCCCCCCAGGAGATCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrserHisSerHisProThr---GlnSerLysAlaThrGlnProSerSerSerThrVal
                                                                                                                                                                                                                 GluargargvalilevalproalaaspproThrieuTrpSerThraspHisValArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                           PhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArgPro
                                                                                                                                                                                                                                                    62 AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer
                                                                                                                                                                                                                                                                                                                                    ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly
                                                                                                          U; 0 Other;
                                                                                                                                     3166
407
14
14
14
                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                          T; 0
                                                                                                         C; 768 G; 713
                                                                                                                                                                                                  (1-3166)
                                                                                                                                                                                                   US-09-902-772-2 (1-451) x ABX76295
                                                                                                                                    1.55e-176
2182.00
91.72%
88.67%
89.28%
                                                                                                          915 A; 770
                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                           BP;
                                                                                                           Sequence 3166
                                                                                                                             Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202
                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                     122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      926
                                                                                           invention
                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                      281
                                                                                                                             Alignment Sc
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
    g
                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                   8
```

```
1105
                                                                                                                                                                                                                          1165
                                                                                                                                                                                                                                                                                                                                                                                                           AACTACGATAAGCTCAGCCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAG 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCACCCCCGGGGGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCC 1465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCACGCCCACCCACAGAAGATGAACTTTGTGGGGCCCCCACCCTCCAGCCTCCCGGGG 1525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACATCTICCAGITITITITICCGCCCCAAACCCATACTGGAATTCACCAACTGGGGGGTATA 1585
                                                                                                                                                                                                                                                                                                         CTGTCGGACAGCTCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGAGGAGTTCAAG 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              412
                                                                                                                                                                                                                                                                                                                                                                           332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGly1le 432
                                                                                                                                                                             292
                                                                                                                                                                                                                                                                            312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                         MetThraspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet
ACGGTCACGGCCACCCCAGGCCCCAGTGGTGCTCAACCATCTCCTTCCACGTG
                                                                                                                                                                                                                          AGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTGGCAGTTCCTGGAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal
                                                                                                                                                                        SerargieualaaanProGlySerGlyGlnIleGlnLeuTrpGlnPheleuLeuGluLeu
                                                                                                                                                                                                                                                                            LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPhelys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gorbatcheva B;
Anderson D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prostate; cancer; cytostatic; gene therapy; marker; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Monahan JE, Endege WO, Gannavarapu M,
Kamatkar S, Wonsey AM, Glatt K, Zhao X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-0307982P.
2001US-0314356P.
2001US-0325020P.
2001US-0341746P.
2002US-0362158P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB75274 standard; cDNA; 3166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002WO-US023913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prostate cancer marker cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003009814-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUL-2001; 2
22-AUG-2001; 2
25-SEP-2001; 2
12-DEC-2001; 2
05-MAR-2002; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ъį
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schlegel R,
Hoersh S,
                                                                                                                              1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1466
                                                                            253
                                                                                                                                                                             273
                                                                                                                                                                                                                          1106
                                                                                                                                                                                                                                                                            293
                                                                                                                                                                                                                                                                                                                              1166
                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB75274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT (
ADB7527,
ADB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 % B
                                                                         ò
                                                                                                                   g
                                                                                                                                                                        8 6
                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
```

```
The invention relates to newly discovered cancer markers associated with the cancerous state of prostate cells. Also disclosed is a method of assessing whether a patient is afflicted with prostate cancer. The method of the invention involves assessing whether a patient is afflicted with prostate cancer. The method of the invention involves assessing whether a patient is afflicted with prostate cancer by comparing the level of expression of a marker in a control non-prostate cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal control non-prostate cancer sample, where a significant increase in the level of expression of the marker in the patient sample and the normal prostate cancer, and may be useful in gene therapy. Sequences given in ADBASIAT-ADBAS641 represent marker cDNA and proteins. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the print of the patiences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281 GCACCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cergargaargeagrereeceaaagecegaagareereegeagecagecagacaccerrees
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAACTACGGCAGCTACATGGAGGAGGAGCACATGCCACCACAACATGACCACGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluargargvalIlevalProAlaAspProThrLeuTrpSerThrAspHisValArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rescriceastrescesteaaaaaaararescerrecaaacsreaacarerrerrarrecas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ASDIJEASDGJVLySGJULGUCYSLYSMETTHTLYSASDASDPHGGJDARGLGUTHRFPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALCATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341 GCCTACGGAACGCCACCACCTGGCTAAGACAGAGATGACGGCGTCCTCCTCCAGCGACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyGlnThrSeriysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaArgValThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys
                                         prostate
                                         treating
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3166 BP; 915 A; 770 C; 768 G; 713 T; 0 U; 0 Other;
                                            ö
                                           for diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                           Disclosure; SEQ ID NO 98; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-3166)
                                            nucleic acid molecule, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-902-772-2 (1-451) x ADB75274
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.55e-176
2182.00
91.72%
88.67%
            WPI; 2003-248033/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                            New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
```

```
De Bari C,
                                                                                                                                                                                                                                            WPI; 2003-221398/21.
P-PSDB; ABP97696.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                              (TIGE-) TIGENIX NV.
                                               WO2003000724-A2
                                                                                                                                                25-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                 03-JAN-2003.
                                                                                                                                                                                                              Luyten F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuDroTyrMetSerSer 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrserSerSerPhePheAlaAlaProAenProJyrTrpAenSerProThrGlyGly1le 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                MetThraspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
                                                                                                                                                                                252
                                                                                                                                                                                                                                                                                                                                                                               LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys 312
 221
                                                                                 925
                                                                                                                233
                                                                                                                                              926 cogttaatgcatgctagaaacacadártítáccárárdádcccccaddagarcadccrdd 985
                                                                                                                                                                                                                                              253 ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer 272
                                                                                                                                                                                                                                                                                                               292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrProAsnThrArgieuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 333 AsntyrasplysleuSerargalaLeuargTyrTyrTyrAspLysAsnIleMetThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1406 CCCCACCCCCGGAGTCATCTCTGTACAAGTACCCCTCAGACCTCCGGTACATGGGCTCC
                                                                                                                                                                                  ThrserHisserHisProThr -- GlnSerLysAlaThrGlnProSerSerThrVal
                                                 PhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgPro
                                                                          CATTTG-----ACTTCA-----GATGATGTTGATAAAGCCTTACAAAACTCTCCA
                                                                                                                  ------AspleuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                                                                                                                                                                                                                                               SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; splice variant; ERG; Ets; transcription factor; C-1-1; C-1-2; C-1-3; C-1-4; chondrocyte; articular chondrocyte; bone disease; cartilage disease; tumour; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleotide sequence of human ERG splice variant C-1-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
146. .1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ68767 standard; DNA; 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                                                                                                                                                                                                                                                    1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABZ68767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1286
                                                                                                                                                                                                                                                                                   1046
                                                                                                                                                                                                                                                                                                                                                  1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1226
                   821
                                                    202
                                                                                    881
                                                                                                                  222
                                                                                                                                                                                  234
                                                                                                                                                                                                                 986
                                                                                                                                                                                                                                                                                                                   273
                                                                                                                                                                                                                                                                                                                                                                                    293
                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
ABZ68767
ID ABZ68767
XX ABZ68767
XX ABZ6
XX A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\sigma}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               중 음
                                                                                                                                                                       6 6 6 6
                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                         g
                                            ਨੇ
                                                                                                                  δ
```

Key

```
The present sequence encodes splice variant C-1-2 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the SH bp fragment, and the presence of the 218 bp and 72 bp fragments of the ERG-3 cDNA sequence); C-1-2 (characterised by the absence of the 81 bp and 218 bp cc sequence); C-1-2 (characterised by the absence of the RG-3 cDNA coquence); C-1-3 (characterised by the absence of the PD, 81 bp and C-18 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 72 bp, 81 bp and 81 cc the absence of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the RG-3 cDNA sequence). The splice variant cc the absence of the ERG-3 cDNA sequence). The splice variant cc plynucleotides are useful for stabilizing the phenotype of chondrocytes or cells with a chondrocytes-like phenotype, for preventing decorporation of articular chondrocytes during in vitro culture collination of articular chondrocytes during in vitro culture collination of articular chondrocytes during in vitro culture collination of articular chondrocytes during in vitro calture collination of articular chondrocytes. Cells expressing the percenting or treating or repairing cartilage-related collinations are associated tumour, or as marker of a mannal and a mannal collination in the producing or repairing cartilage tissue in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HisValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIle 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuleuPheGlnAsn11eAspGlyLysGluLeuCysLysMetThrLysAspAspPheGln 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118 MetThrThrAsnGluArgAzgVallleValProAlaAspProThrLeuTrpSerThrAsp 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78 SerArgAsnSerProAspAspCysSerValAlaLysGlyGlyLlyLysMetValSerSerSer 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel splice variants of the Bts-related gene (BRG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Bts-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspAsnValGlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1291 BP; 334 A; 409 C; 302 G; 246 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1291
356
6
12
1
/*tag= a
/product= "ERG splice variant C-1-2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-902-772-2 (1-451) x ABZ68767 (1-1291)
                                                                                                                                                                                                                                                                                                                                                                                                          Dell'accio F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 10; Fig 5; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.11e-157
1955.50
96.53%
94.93%
80.01%
                                                                                                                                                                                                                    08-MAR-2002; 2002WO-EP002605.
                                                                                                                                                                                                                                                                                  2001US-0300756P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

```
1001 GAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCCAC 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1121 ITTTTTGCCCCCAAACCCATACTGGAATTCACCAACTGGGGGTATATACCCCAACACT 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          decradectradas processos de contratos de con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1061 CCACAGAAGATGAACTTTGTGGGGGCCCCACCTCCAGCCCTCCCGGTGACATCTTCCAGT 1120
341 ITGTTATTCCAGAACATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGTCCAG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           436
                                                                                                                                                                                   ArgGlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArglle 217
                                                                                                                                                                                                                                                                                                          ThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSer 237
                                                                                                                                                                                                                                                                                                                                                                   521 ACAACTAGGCCAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGGACCGGTCACGGC 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspPro 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCAGCCGCGCCCTCCGTTACTACTATGACATCATCATGACCAAGGTCCATGGGAAG 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHis 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAla 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSer 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rccaacrccagcrdcarcaccrccaacccaaccaaccaacracaacarcaacarcaccaaccc 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLys 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           821 GACGAGGTGGCCCGGCGCTGGGGAGAGCGAAGAGCAAACCCAACATGAACTACGATAAG 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLys 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              357 ArgTyrAlaTyrLysPheAspPheHisGlyIleAlaClnAlaLeuGlnProHisProPro 376
                                                        461 AGGGGTGCATTTTATTTTCCCAAATACTTCCAGTATATCCTGAAGCTACGCAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACCAGCGTCCTCAGTTCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProglnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                              HisProThr --- GlnSerLysAlaThrGlnProSerSerThrValProLysThrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, splice variant, ERG, Ets, transcription factor, C-1-1, C-1-2, C-1-3, C-1-4, chondrocyte, articular chondrocyte, bone disease, cartilage disease, tumour, gene, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1181 AGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                437 ArgleuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleotide sequence of human ERG splice variant C-1-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ68769 standard; DNA; 1372 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                    401
                                                                                                                                                                            198
                                                                                                                                                                                                                                                                                                       218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           417
                                                                                                                                                                                                                                                                                                                                                                                                                              238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                      a
                                                                                                                                                        ò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                $ A
                                                                                                                                                                                                                                                                                                                                                                                                              \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             점 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठे व ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
The present sequence encodes splice variant C-1-4 of human ERG. ERG belongs to the Ets family of transcription factors. The specification describes C-1-1 (characterised by the absence of the 81 bp fragment, and the presence of the 22 bp fragments of the ERG-3 cDNA sequence); C-1-2 (characterised by the absence of the 81 bp and 218 bp gragments, and the presence of the 72 bp fragment of the ERG-3 cDNA sequence); C-1-3 (characterised by the absence of the 72 bp, 81 bp and 218 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 18 bp fragments of the ERG-3 cDNA sequence); and C-1-4 (characterised by the absence of the 218 bp fragment, and the presence of the 72 bp and 81 bp fragments of the ERG-3 cDNA sequence). The splice variant polynucleotides are useful for stabilizing the phenotype of chondrocytes or cells with a chondrocytes like phenotype, for preventing decreases or Ess-related gene associated tumour, or as marker of progenitor cells of stable chondrocytes. Cells expressing the polynucleotide are useful for producing or repairing cartilage tissue in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAsp 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 rcaaggaacrerecreargargaargeagereregeeaaaaggeeggaagargergggeeageeea 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspasnValGlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsn 117
                                                                                                                                                                                                                                                                                                                                                                  Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerArgAsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221 ATGACCACGAACGAGCGCAGAGTTATCGTGCCAGCAGTCCTACGCTATGGAGTACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1372 BP; 359 A; 430 C; 314 G; 269 T; 0 U; 0 Other;
                                                                /product= "ERG splice variant C-1-4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-902-772-2 (1-451) x ABZ68769 (1-1372)
               Location/Qualifiers
                                                                                                                                                                                                                                                                                Dell'accio
                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 112; Fig 7; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.02e-155
1926.00
89.80%
88.31%
78.81%
                                                                                                                                                                         08-MAR-2002; 2002WO-EP00260S
                                                                                                                                                                                                          25-JUN-2001; 2001US-0300756P
                                . .1309
                                                                                                                                                                                                                                                                                Luyten F, De Bari C,
                                                                                                                                                                                                                                                                                                                  WPI; 2003-221398/21.
                                                                                                                                                                                                                                            (TIGE-) TIGENIX NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                    P-PSDB; ABP97698
                                                                                                   WO2003000724-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
DB:
               Key
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

splice variant C-1-3

(first entry)

/product= "ERG splice variant C-1-3"

Location/Qualifiers 146. .1156

/*tag=

<u>г</u>

Dell'accio

De Bari C,

```
Novel splice variants of the Ets-related gene (ERG) transcription factor, useful for preventing or treating bone-related or cartilage-related diseases or Ets-related gene associated tumor.
                                                                                            Human; splice variant; ERG; Ets; transcription factor; C-1-1; C-1-2; C-1-3; C-1-4; chondrocyte; articular chondrocyte; bone disease; cartilage disease; tumour; gene; ss.
                                                                Nucleotide sequence of human ERG
                                                                                                                                                                                                                                                                                                                                                                       08-MAR-2002; 2002WO-EP002605
                                                                                                                                                                                                                                                                                                                                                                                                          25-JUN-2001; 2001US-0300756P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-221398/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                            (TIGE-) TIGENIX NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; ABP97697
                                                                                                                                                                                                                                                                                                   WO2003000724-A2
                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                     03-JAN-2003
                                   16-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Luyten F,
 ABZ68768;
                                                                                                                                                                                                                Key
Crecedidacaretrecagniningereceecaaceearacidaanidaceacr 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetThriysValHisGlyLysArqTyrAlaTyrLysPheAspPheHisGlyIleAlaGln 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuProValThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThr 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrAspLysAsn1le 349
                                                                                                                                                                                                                                                                                                                                         640
                                                                                                                                                                                                                                                                                                                                                                                                                                               269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGluLeuLeuSerAspSerSerAsnSerAsnCysileThrTrpGluGlyThrAsnGly 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlupheLysMetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLys 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  177
                                                     400
                                                                                         197
                                                                                                                 198
                                                                                                                                                                                               520
                                                                                                                                                                                                                                   210
                                                                                                                                                                                                                                                                     580
                                                                                                                                                                                                                                                                                                     230
                                                                                                                                                                                                                                                                                                                                                                         SerAlaTrpThrSerHisSerHisProThr---GinSerLysAlaThrGlnProSerSer 249
                                                                                                                                                                                                                                                                                                                                                                                                          rcasccrissaccscriates contacted de contacte de la contacte de cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProThrSerSerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeu 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAACAAGTAGCCGCCTTGCAAATCCAGGCAGAAGCCAGATCCAGCTTTGGCAGTTCCTC 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Met Ser Ser Tyr His AlaHis ProGln Lys Met Asn Phe Val Ala ProHis ProProAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaLeuGlnProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyr
                                                                                          ArgleuThrProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGlu
                                                                                                                                                                                             461 ACTCCTCTTCCACATTTGACTTCAGATGATGATAAAGCCTTACAAAACTCTCCACGG
                                                                                                                                                                                                                                                             TTAATGCATGCTAGAACACAGGGGGGGGCGCAGCTTTTATTTTTCCCAAATACTTCAGTATAT
                                                                                                                                                                                                                                                                                                                                  SerThrval ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGly
                      LeuLeuPheGlnAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGln
                                                 341 TIGITATICCAGAACAICGAIGGAAGAACTGIGCAAGAIGACCAAGACGACTICCAG
                                                                                                                                                                                                                                   ------GlyAlaThrPhellePheProAsnThrSerValTyr
                                                                                                                                                                                                                                                                                                       ProGlublaThrGlnArgileThrThrArgProAspLeuProTyrGluGlnAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
ABZ68768
ID ABZ68768 standard; DNA; 1219
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1301 TACTAC 1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          450 TyrTyr 451
                                                                                                                                                                  Arg---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        881 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                410
                                                                                                                                                                                                                                                                         521
                                                                                              178
                                                                                                                                                                                                                                                                                                                                                                                                                   641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310
                                                                                                                                401
                                                                                                                                                                 198
                                                                                                                                                                                                                                                                                                             211
                                                                                                                                                                                                                                                                                                                                               581
                                                                                                                                                                                                                                                                                                                                                                               231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 821
                          158
                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                       250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B & B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                   $ B $
                                                                                                                                                                                                                                                                                                                                                                                                        8 & 8
                                                                                                                                                                                             g
                                                                                                                                                                                                                                       8 8
                                                 g
                                                                                            P 65
                                                                                                                                                     8
```

```
SerArgAsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSer
                                                                                                                                                                 Sequence 1219 BP; 312 A; 393 C; 288 G; 226 T; 0 U; 0 Other;
                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                 US-09-902-772-2 (1-451) x ABZ68768 (1-1219)
Claim 11; Fig 6; 60pp; English
                                                                                                                                                                                          4.74e-145
1807.50
90.40%
88.53%
73.96%
                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                   78
                                                                                                                                                     mammal
                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                셤
```

BP.

```
1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    416
                                                                                                                                                                                                                                                                                                                                                                                                                          276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           988
                                                                                                                                                                                                          ArgLeuThrProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGlu 197
                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                              508
                                                                                                                                                                                                                                                                                                                                                                       238 HisProThr -- GlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGlu 256
                                                                                                                                                                                                                                                                                                                                                                                                568
                                                                                                                                                                                                                                                                                                                                                                                                                                                    628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              808
                      220
                                                  137
                                                                          280
                                                                                                     157
                                                                                                                              CATGTGCGGCAGTGGCTGGGCGGTGAAGAATATGGCCTTCCAGACGTCAACATC 340
                                                                                                                                                                                 400
117
                                                                                                                                                        LeuLeuPheGlnAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGln 177
                                                                                                                                                                                                                                                               ArgGlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIle 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuSerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCCAC
AspAsnValGlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsn
                                                                                                                                                                             TIGITIATICCAGAACATCGATGGGAAGGAACTGTGCAAGATGACCAAGACGACTTCCAG
                                                                                                                                                                                                                                    Aggercaceceageracaaegeegacarecrierereacarerecaeraeraeagaga
                                                                                                                                                                                                                                                                                                                                 AspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACCAGGGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       629 AATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crcaecececececerraciaerararaacaacarcarcarcaacerecarecare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cecracectracaaetriceaetrecaeedareeceaeedeereeaeeceaeecee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProglnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrrrracinececeaaaceearacineaarreaceaacreeeeerararaceeeeracaeer
                                                 MetThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAsp
                                                                                                                                                                                                                                                                                                                 218 ThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSer
                                                                                                                                                                                                                                                                                                                                                                                              CACCCCACGCCCCAGTCGAAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSer
              GACACCGTTGGGATGAACTACGGCAGCTACATGGAGGAGAAGCACACTGCCACCCCCAAAC
                                                                         221 ATGACCACGAACGAGGGGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGAC
                                                                                                     HisValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
                                                                                                                                                                                                                                                                                                                                                                                                                          257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                       161
                                                  118
                                                                                                    138
                                                                                                                              281
                                                                                                                                                         158
                                                                                                                                                                                 341
                                                                                                                                                                                                            178
                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                              461
                                                                                                                                                                                                                                                                                                                                                                                                509
                                                                                                                                                                                                                                                                                                                                                                                                                                                    569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                     g &
                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                       셤
                                                                                                                                                     ò
                                                                                                                                                                         셤
                                                                                                                                                                                                   à
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                 QQ
                                                                                                                                                                                                                                                                                                            ò
               Вþ
                                                 8 6
                                                                                           ℅
```

```
The invention relates to recombinant carcinoma associated (CA) nucleic acid sequences from mouse and human (ADA01482-ADA03094), and to recombinant carcinoma associated proteins (CAP) encoded by them. The invention also encompases expression vectors and host cells comprising a comparison also encompases expression vectors and host cells comprising a comparison of the molecular acid, a polypeptide (especially an antibody) that specifically compared to the protein, and a blochip comprising A nucleic acid or fragments thereof. The sequences of the invention were identified using oncogenic retroviruses, which insert into the genome of the host organism or random. Many of these do not carry transduced host oncogenes or pathogenic trans-acting viral genes, meaning that cancer incidence is a direct consequence of the effects of proviral integration into host protooncogenes. The CA nucleic acid sequences can be used to diagnose carcinoma (especially breast cancer, prostate cancer, lymphoma or carcinoma (especially breast cancer, prostate cancer, lymphoma or tissues. CA nucleic acids, proteins and antibodies are also useful as therapeutic agents and in screening and evaluating drug candidates. The present sequence represents a specifically claimed human CA nucleic acid contronic format inted specification, but was obtained to in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                    Human, carcinoma associated; oncogene; carcinoma; cancer; breast;
prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein,
                                                                                                                                                                                                                                   Human FLI1 carcinoma associated coding sequence, SEQ ID NO:1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         combinant nucleic acid encoding carcinoma associated for preparing compositions for treating carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 359 A; 422 C; 333 G; 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 1210; 245pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              x ADA02692 (1-1359)
                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.52e-129
1624.50
79.43*
66.96*
66.47*
                                standard; cDNA; 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-DEC-2002; 2002WO-US041414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-DEC-2001; 2001US-00035832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-587068/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003057146-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                      06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morris DW;
                                                                                                     ADA02692;
                                    ADA02692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
ADAO2692
ADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
```

10

RESULT

451

d

Š 8 8

8 6 B

6 B 6

2 & B

```
The invention relates to a novel recombinant nucleic acid comprising a nuclectide sequence selected from any of the 660 sequences fully defined in the specification. A polynucleotide of the invention has cytostatic activity, and may have a use in gene therapy, or in a vaccine. The recombinant nucleic acids and polypeptides are useful for treating carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and sarcomas. The present sequence represents a human cDNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     carcinomas, lymphomas,
1246 Tringgagedegrarcacaariaciegacereceeecaeegagaareraceeaae
                                             GlnLysMetAsnPhevalAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                   CAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                            gene therapy; vaccine; carcinoma; lymphomas;
                                                                                                                                                                                                GTCCCCCGCCATCCTAACACCCCACGTGCCTTCACACTTAGGCAGCTACTAC 1356
                                                                                                                 PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-
                                                                                                                                                                             ---ThrargLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1359 BP; 359 A; 422 C; 333 G; 245 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1359
306
57
83
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       useful for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                             cancer; neoplasm; adenocarcinoma; sarcoma; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancers, neoplasm, adenocarcinoma, or sarcomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 258; 2304pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-1359)
                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x ADB72430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recombinant nucleic acid,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.52e-129
1624.50
79.43%
66.96%
                                                                                                                                                                                                                                                                             standard; cDNA; 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-MAR-2001, 2001US-00798586.
23-CCT-2001, 2001US-00004113.
08-NOV-2001, 2001US-00052482.
30-NOV-2001, 2001US-00034650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-DEC-2001; 2001WO-US051291
                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          됐;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                              human; ss; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Engelhard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-239337/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                           Human FLI1 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003008583-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morris DW,
                                                                                 1186
                                                                                                                  418
                                                                                                                                                                                 436
                    1126
                                                  398
                                                                                                                                                                                                                1306
                                                                                                                                                                                                                                                                               ADB72430
                                                                                                                                                                                                                                                                                                              ADB72430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ношо
                                                                                                                                                                                                                                              RESULT 11
                                                                                                                                                                                                                                                                 ADB7243
                                                                                                                                                                                                                                                                                8 8
                                                                                                             ઠે
                                                                                                                                           g
                                                                                                                                                                               8
                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1006 AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAAGTGCACGGCAAAAGA 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGTGGCCAGGCGCTGGGGCGAGAAAGCAAGCCCAACATGAATTACGACAAGCTG 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGACAGCGCC 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluvalAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyralaTyrLygPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro 397
                                                                                                                                                                                                                                                                                                                              ThrThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                              178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caaceeeeeceasareeerareaareerasareeraseeeeeaaeeaaeaaeaaae 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer 297
                                                                                                                                                                                                                                                                 118
                                                                                                                                                                                                                                                                                                                                                               411
                                                                                                                                                                                                                                                                                                                                                                                              158
                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCAATGGCTGCAGTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACATCC 471
                          TCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT 120
                                                                                                 180
                                                                                                                                                                 231
                                                                                                                                                                                                                              291
                                                                                                                                                                                                                                                                                              351
                                                                                                                                                                                                66
                                                                   59
                                                                                                                                  79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                     GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAAGTCC
                                                                                                                                                                                                                                                                                  GTCAAAGAAGACCCTTCTTATGACTCAGTCAGAAGAGGAGAGCTTGGGGCAATAACATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGGCCTCAAAAAGTCCTCCCTTGGAGGGGCACAAAAGGATCAGTAAGAATACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                   100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                ACCACCAACGAGAGAGACATCGTCCCCGCAGACCCCACACTGTGGACACAGGAGCAT
                                                                                                                                                                                                                                                                                                                                                                                              ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTCCAGAACATGGATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gecaccaccactadadacacgaagagcidingidacaccicaginaccicaggaa---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrargProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
      CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSer
                                                                   GlufyrglyglnThrSerlysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358
                                                                                                                                                                                                                                                                                                                                                                                                                               412 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           378
                                                                                                                                                                                                                                                                                                                                                                                                 139
                                                                   40
                                                                                                                                                                                                                                  232
                                                                                                                                                                                                                                                                                                  292
                                                                                                                                                                                                                                                                                                                                 119
                                                                                                                                                                                                                                                                                                                                                                352
                                                                                                                                                                   181
                                                                                                                                                                                                    80
```

8 8 8

6 6 6

6 6 6 6 6 6 6 6 6 6

8 S

D ç 셤 $\dot{\circ}$

```
WPI; 1993~386580/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; AAR44556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9323549-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
26-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-NOV-1993
                   1066
                                                                                                                                                                 1186
                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ50644;
                                                     378
                                                                                                                                                                                                                                                                           436
                                                                                                                                                                                                                                                                                                                                                   RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                     AAQ50644

IND AAQ5

IND AAQ5

IND AAQ5

IND IN 25-W

IND IN 25-W

IND IN 26-W

IND IN 26-W

IND IN 26-W

IND IN 26-W

IND IN WO93

IND IN WO93

IND IN WO93

IND IN WO97

I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                           ద
                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                              셤
                                                 Š
                                                                                      d
                                                                                                                   ò
                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              337
                                                                                                          120
                                                                                                                                                                                180
                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                                                     118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           945
                                                                                                                                                                                                                                                                                                                                291
                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358 TyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                             n
O
                                                                                                                                                                                                                      79
 20
                                 9
                                                                      м
9
                                                                                                                                                                                                                                                                                            80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn 99
                                                                                            61 TCAGGGTACGGAGGGGAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT
                                                                                                                                           40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                             ---CCAGTGAGGGTCAACGTCAAGGGGAGTAT-----GACCACATGAATGGATCCAGG
                                                                                                                                                                                                                                                                                                                100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                             292 AACCCCATGAACTACAACAGCTATATGGACGAGAAAGAATGGCCCCCCTCCTCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---AGTICACTGGCCTATAATACAACCTCCCACAACCAATCCTCACGATTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826 CCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCTGGAGCTGCTCTCCGACAGCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B86 AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              318 GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCCGGGCCCTCCGTTATTACTATGATAAAAACATTATGACCAAAAGA
                   21 CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSer
                                                                                                                                                                              ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            412 GTGAGGCAATGGCTGGAGTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159 LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   219 ThrargProaspLeuProTyrGluGlnAlaargargSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProThrGlnSerLysAlaThrGln - - - ProSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGGTGGCCAGGCGCTGGGCCGAAAAGCAAGCCAACATGAATTACGACAAGCTG
MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                  ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        766 chacecccaeccaehrcenarcaehrcreeecceaccaecaecaercecraecaac
                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        298
                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             278
                       5
C
                                                                  ò
                                                                                              셤
                                                                                                                                                                          g
                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
1245
                                                                                                              1125
                                                                                                                                                                                                                                                                                                                                               1246 TTTGGAGCCGCATCACAATACTGGACCTCCCCACGGGGGGAATCTACCCCAACCCCAAC 1305
                                                                                                                                                                                                                                                                                                  435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid of EWS gene and its hybrid(s) - contg. gene sequence involved in chromosomal trans-location, also derived mRNA, probes, fusion proteins etc., for diagnosis and treatment of Ewing sarcoma and melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The probe 11RR1 was used to screen a human marrow cDNA library (Clontech cat.# HLL1058). The clone BM025 was identified and sequenced. It represents the entire coding region together with 5'- and 3'-UTRs of the Hum-Fli-1 gene. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chromosomal translocation, chimeric, chimaeric, Ewing sarcoma; Ews gene; malignant melanoma; hum-fli-1; primitive peripheral neuroectodermal tumour; human chromosome 11; human chromosome 22; ss.
418 PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlylleTyrProAsn----
                                                                                 SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerTyrHisAlaHisPro
                                                                                                                                                                                          398 GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                                                         CAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTTCCTCCAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plougastel
                                                                                                                                                                                                                                                                                                                                                                                                                                 1306 GTCCCCGGCATCCTAACACCCCACGTGCCTTCACACTTAGGCAGCTACTAC 1356
                                                                                                                                                                                                                                                                                                                                                                                                        451
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2938 BP; 847 A; 692 C; 675 G; 724 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Melot T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= a
/product= "HUM-FLI-1"
2908. .2913
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Desmaze C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
143. .1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Hum-Fli-1 gene clone BM025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 7; 123pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ50644 standard; cDNA; 2938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93WO-FR000494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92FR-00006123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CNRS ) CNRS CENT NAT RECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aurias A, Delattre O,
Thomas G, Zucman J;
```

```
318 (
                                                                                                                                                                           418
                                                                                                                                                                                                                           1448
                                                                                                                          1268
                                                          1148
                                                                                          1208
                                                                                                                                          398
                                                                                                                                                                                                            436
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bertucci
                                                                          358
                                                                                                          378
                                                                                                                                                                                                                                                                            ABV94304
                                                                                                                                                                                                                                                    ABV94304
                                    8 6
                                                                                     g
                                                                                                                      엄
                                                                                                                                                         a
                                                                                                                                                                                      셤
                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                            g
                                                                       à
                                                                                                     ò
                                                                                                                                         ò
                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                297
                                                                                                                                                                                                                                                                                                                                                                                                                     218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      277
                                                                                           ATGGACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACCAGTCCCTCTTTGAC 202
                                                                                                                                                            ---CAGTGAGGGTCAACGTCAAGGGGAGTAT-----GACCACATGAATGGATCCAGG 373
                                                                                                                                                                                                                                 GAGTCTCCGGTGGACTGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC 433
                                                                                                                                                                                                                                                    ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProProAsnMet 118
                                                                                                                                                                                                                                                            ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                    553
                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                    LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg 178
                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                      LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                               ThrargProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProThrGlnSerLysAlaThrGln -- - ProSerSerThrValProLysThrGluAsp 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      907
                                                                                                                           TCAGCGTACGGAGCGCACCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT 262
                                                                                                                                                 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln 59
                                                                                                                                                                                   79
                                                                                                                                                                                                                   66
                                                                                                                 CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSer 39
                                                                                                                                                                                                                                                                                                                                                                614 TITITCCAGAACATGGATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGGCCTCAACAAAGTCCTCCCCTTGGAGGGGCACAAAGGATCAGTAAGAATACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGACAGGCGCC
                                                                                                                                                                                                                                                                                                                                    GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GECAAAGAAGAAGCCTTCTTATGACTCAGTCAGAAGAGGAGCATGGGGCAATAACATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      908 chaceecccaecchearccaraccharchearccheacceaccheacagracchacchac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                    AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn
                                                                                                                                                                                                                                                                                              MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                   ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
        2938
306
57
57
11
        Length:
Matches:
Conservative:
Mismatches:
                                                                 US-09-902-772-2 (1-451) x AAQ50644 (1-2938)
7.228-129
1624.50
79.43%
66.96%
                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
 Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                      731
                                                                                                                                                                                                                                                                                                                                                                                                                                                      219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        278
                                                                                                  143
                                                                                                                  21
                                                                                                                                  203
                                                                                                                                                   40
                                                                                                                                                                  263
                                                                                                                                                                                    9
                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                    001
                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                    119
                                                                                                                                                                                                                                                                                                    494
                                                                                                                                                                                                                                                                                                                     139
                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                     159
                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                    323
        No.:
                                                                                                                                                                                                             8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                              g
                                                                                                                 8 8
                                                                                                                                                             엄
                                                                                                                                                                                   8 6
                                                                                  ò
                                                                                                                                             8
```

```
435
                                                                                                                                                                                                          TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a polymucleotide library (1) useful in the molecular characterisation of a carcinoma, comprising a pool of polymucleotides or its subsequences which are either underexpressed or overaxpressed in tumour cells, and correspond to any of the polymucleotide sequences chosen from the 468 sequences given in ABN94010 to ABN94477. Also described: (1) a polymucleotide array (11) useful for the prognosis or diagnostic of tumour, comprising (1); and (2) detecting
                                                                                                                                                                                                                                                                                                             SerSerMetTyrLygTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1388 TTTGGAGCCGCATCACAATACTGGACCTCCCCACGGGGGAATCTACCCCAAC
GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                  SerargalaleuargTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                     GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel polymucleotide library useful in molecular characterization of carcinoma, comprising a pool of polymucleotide sequences or its subsequences which are either underexpressed or overexpressed in tumo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; breast carcinoma; cancer; tumour; cytostatic; anti-tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GICCCCCGCCATCCIAACACCCACGIGCCIICAACACTIAGGCAGCIACIAC 1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Breast carcinoma related nucleotide sequence SEQ ID NO:295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Viens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Birnbaum D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 300-301; 401pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV94304 standard; cDNA; 2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-DEC-2001; 2001WO-IB002811.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-DEC-2000; 2000US-0254090P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Houlgatte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-619023/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IPSO-) IPSOGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200246467-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ľ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JAN-2003
```

```
a patient, and reacting the polynucleotide supplement are correlated with a cancer, involves obtaining a polynucleotide sample from a patient, and reacting the polynucleotide sample obtained with a probe immobilised on a solid support, where the probe comprises any combination of the polynucleotide sequences of (I) or its expression products encoded to proposition of the polynucleotide sequences of (I), and detecting the reaction product.

(I) have cyrostatic activities and can be used as anti-tumnour agents. (I) is useful in molecular characterisation of a carcinoma. (I) are useful for the prognosis or diagnostic of tumnour, in differentiating a continual cell; differentiating a tumnour without lymph nodes from a tumnour without lymph nodes, differentiating attumour with lymph nodes from a tumnour without lymph nodes, differentiating antacypline sensitive tumnours from antracyclaine-insensitive tumnours, and classifying good and poor prognosis of primary breast tumnours. (I) is useful for large-scale molecular characterisation of breast cancer that help in prediction, prognosis and cancer treatment, and for detecting differentially expressed genes that
   differentially expressed polynucleotide sequences which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 correlated with a cancer
8X88888888888888888888888888888
```

Sequence 2957 BP; 855 A; 698 C; 680 G; 724 T; 0 U; 0 Other

Sequence 2957 BP; 855 A; 698 C; 680 G; 724 T; 0 U; 0 Other;	nment Scores: 7.28e-129 Length: 2957 No.: 1624.50 Marches: 306 snt Similarity: 79.43\$ Conservative: 57 Local Similarity: 66.96\$ Mismatches: 83 r Match: 66.47\$ Indels: 11 c Gaps: 7	902-772-2 (1-451) x ABV94304 (1-2957)	luAspGlnSerLeuPhe	173 ATGGACGGGACTATTAAGGAGGCTCTGTCGGTGAGCGACGACGACCAGTCCCTTTTGAC 232	21 CyshlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSer 39	233 TCAGCGTACGGAGCGGCAGCCCATCTCCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT 292	40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln 59	293 GACTACGGGCAGCCCCACAAGATCAACCCCCTCCCACCACAGGAGTGGGATCAATCA	leLysMetGluCysAsnP	353CCAGTGAGGGTCAACGTCAAGCGGGAGTATGACCACATGAATGGATCCAGG 403	80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn 99	404 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC 463	100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProAsnMet 118	464 AACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCTCCCAACATG 523	119 ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138	524 ACCACCAACGAGGAGGAGAGTCATCGTCCCCGCAGACCCCACACTGTGGACACAGGAGCAT 583	139 ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu 158	584 GTGAGGCRATGGCTGGAGTGGGCCCTTGATGGATGGAGATCGACATCC 643	159 LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg 179	644 TTTTCCAGAACATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCCGC 703	179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198	704 GCCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGAA 760	199 GlyalaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr 218	761AGTTCACTGCTGCTATATACAACCTCCCACACGACCAATCCTCACGATTGAGT 817	
SQ CX CX	Alignment Pred. No. Score: Percent S Best Loca Query Mat	06-60-SD	ò	ପୁପ	ò	QD	Š	ΩÞ	ò	qq	ò	QQ	ò	Ор	'n	qq	ò	ΩÞ	ò	ΩÞ	ò	QQ	ò	gg	

11-APR-2002

```
1057
                                                                                                                                                                                                                                                                  1117
                                                                                                                                                                                                                                                                                                                           1177
                                                                                                                                                                                                                                                                                                                                                                                      1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1298 TOGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGCCCACCAG 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1477
                            877
                                                                                    937
                                                                                                                  277
                                                                                                                                             997
                                                                                                                                                                            297
                                                                                                                                                                                                                                     317
                                                                                                                                                                                                                                                                                                337
                                                                                                                                                                                                                                                                                                                                                          357
                                                                                                                                                                                                                                                                                                                                                                                                                 TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    435
ThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis 238
                                                       257
                    CAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAAC
                                                                                                                                                                                             1058 AACGCCAGCTGTATCACCTGGGAGGGGACCAACGAGGAGTTCAAAATGACGGACCCCGAT
                                                                                                                                                                                                                                                                                                                  1118 GAGGTGGCCAGGCGCTGGGGGGGGGGAAAGCAAGCCCAACATGAATTACGACAAGGTG
                                                                                                                                                                                                                                                                                                                                                                              1178 AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGGCAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                        1238 TATGCTTACAATTTGACTTCCAGGCATTGCCCAGGCTCTGCAGCCACACCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1358 CAGAAGGTGAACTTTGTCCCTCCCATCCATCCATCCATGCCTGTCACTTCTCCAGAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1418 TTTGGAGCCGCATCACAATACTGGACCTCCCCCACGGGGGGATCTACCCCCAACCCCCAAC
                                                         ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp
                                                                                    TCTGGCCTCAACAAAGTCCTCCCCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAG
                                                                                                                  GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                             ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSer
                                                                                                                                                                                                                                       AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                                                          SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           398 GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerFhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ss; granulocytic cell; DNA chip; bacterial infection, viral infection; parasitic infection; protozoal infection; fungal infection; sterile inflammatory disease; psoriasis; rheunatoid archritis; glomerulonephritis; asthma; thrombosis; cardiac reperfusion injury; renal reperfusion injury; ARDS; adult respiratory distress syndrome; inflammatory bowel disease; crohn's disease; ulcerative colitis; periodontal disease; granulocyte activation; chronic inflammation; allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human cDNA differentially expressed in granulocytic cells #710.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK84139 standard; cDNA; 2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200228999-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                         239
                                                                                    878
                                                                                                                                               938
                                                                                                                                                                                                                                     298
                                                                                                                                                                                                                                                                                                318
                                                                                                                                                                                                                                                                                                                                                                                                                      358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                378
                                                                                                                    258
                                                                                                                                                                            278
                                                                                                                                                                                                          966
                                                                                                                                                                                                                                                                                                                                                          338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABK84139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                      ò
                                                                               쉱
                                                                                                               ò
                                                                                                                                         셤
                                                                                                                                                                     \delta
                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                          \dot{\delta}
                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                          \stackrel{>}{\delta}
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
```

Fri

```
Beazer-Barclay Y, Weissman SM,
 03-OCT-2001; 2001WO-US030821.
     03-OCT-2000; 2000US-0237189P
         (GENE-) GENE LOGIC INC
```

Detecting granulocyte activation by detecting differential expression of genes associated with granulocyte activation, which serves as diagnostic markers that is useful for monitoring disease states and drug toxicity. WPI; 2002-435328/46.

Vockley J;

Yamaga S,

ID NO 710; 114pp; English Claim 1; SEQ

The invention relates to detecting (MI) granulocyte (GC) activation (GCA), by detecting the level of expression of gene (s) (GBs) identified by DNA chip analysis as given in the specification, and comparing the expression level to an expression level to an activated GC, where a differential expression of GS is indicative of GCA. Also included are modulating (MA) GA by contacting GC with an agent that alters the modulating GCA or an inflammation (especially chronic) in a cisque, an allergic response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease using the gene expression of pathogen or sterile inflammatory disease, by detecting the level of expression of the gene is indicative of inflammation; in a pathogen or sterile inflammatory disease, by detecting the level of expression in a sample of the tissue of gene (s) from Gs, where the level of expression in a sample of the gene is indicative of inflammation; (if) treating the expression of the gene is indicative of inflammation with an expression of the gene is indicative of inflammation with an expression of gene (s) from Gs, where the level of expression of gene (s) from Gs, where the level of expression of gene (s) from Gs, where the level of expression of gene (s) from Gs, where the expression of gene (s) from Gs, where the expression of gene (s) from Gs, where the expression of gene (s) from Gs, which are inflammation in a tissue, M4 is useful for medulating GCA, M2 is useful for medulating GCA, preferably in an experiment of a subject to a pathogen or sterile inflammatory disease, or expression of gene (s) from Gs in the tissue, conditions in a tissue, an allergic response in a subject to a pathogen or sterile inflammatory disease, included the expression of gene (s) from Gs in the condition, viral infection, parabitic infection, parabitic infection, parabitic infection, parabitic infection, parabitic from an expression of gene of the propersion in the present sequence expresses and in granulocytes Note: The sequence of a su

855 A; 698 C; 680 G; 724 T; 0 U; 0 Other; Sequence 2957 BP;

```
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                   Gaps:
                                                                         (1-2957)
                                                                         US-09-902-772-2 (1-451) x ABK84139
7.28e-129
1624.50
79.43%
66.96%
66.47%
                   Percent Similarity:
Best Local Similarity:
                                Best Local S:
Query Match:
DB:
```

20	232	39	292
1 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu 20	ATGGACGGGACTATTAAGGAGGTCTGTGTGTGTGTGTGTG	21 CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSer 39	233 TCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT 292
	173	2	233
ò	Q	٥y	4 2

1117 1177 1237 1057 337 703 198 997 317 357 377 417 403 463 ThrThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHis 138 ValArgGinTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu 158 79 66 GAGGTGGCCAGGCGCTGGGGGCGAGCGGAAAAGCAAGCCCCAACATGAATTACGACAAGCTG SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro ---CAGTGAGGGTCAACGTCAAGCGGGAGTAT----GACCACATGAATGGATCCAGG 80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn 404 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGGGGAGGCGAAGTCC 464 AACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCCTCCTCCCAACATG LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg LeuThrProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArg :::|||::: TCTGGCCTCAACAAAAGTCCTCCCCTTGGAGGGCACAAACGATCAGTAAGAATACAAG ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer AsnSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp AACGCCAGCTCTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT GluvalAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu SerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg agecegecereceiratraciarearaaaaarirareaceaaagrecaeeeeaaaaa TyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 398 GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe GlufyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg 100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet ACCACCAACGAGGAGAGAGACATCGTCCCCCGCAGACCCCACACTGTGGACACAGGAGCAT 644 TITITCCAGAACATGGATGGCAAGGAACTGTGTAAAATGAACAAGGAGGACTTCCTCGG GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr ThrargProaspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn caacedecceaagarecarareaarecraageceaaceageageageareaceaac 1058 1178 40 9 353 524 139 584 159 179 278 998 338 358 378 119 199 258 318 g 셤 셤 ò В 8 셤 ઠે ò δ qq ò 요 ઠ ద 8 ద ò ద ò 셤 ઠે ద 8 ď Š 유 ð g 8 쉽 à ઠે

```
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \dot{\varsigma}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to recombinant carcinoma associated (CA) nucleic acid sequences from mouse and human (ADA01482-ADA01994), and to recombinant carcinoma associated proteins (CAP) encoded by them. The invention also encompasses expression vectors and host cells comprising a binder of the protein, and a biochip comprising CA nucleic acid, a polypeptide (especially an antibody) that specifically binds to the protein, and a biochip comprising CA nucleic acid or carcinomate thereof. The sequences of the invention were identified using oncogenic retroviruses, which insert into the genome of the host organism or trandom. Many of these do not carry transduced host oncogenes or pathogenic trans-acting viral genes, meaning that cancer incidence is a direct consequence of the effects of proviral integration into host protonome (especially breast cancer, prostate cancer, lymphoma or carcinoma (especially breast cancer, prostate cancer, lymphoma or leukaemia) or a propensity to carcinoma by determination of the sequence of the invention and antibodies are also useful as therapeutic agents and in screening and antibodies are also useful as therapeutic agents and in screening and autibodies are also useful as therapeutic agents and in screening and autibodies are also this partent did not form part of the printed specifically claimed human CA nucleic acid specific the invention, but was obtained in electronic format directly from WIPO at
1358 CAGAAGGTGAACTTTGTCCCTCCCCATCCATCCCCCATGCCTGTCACTTCCTCCTCCAGCTTC 1417
                                                                                                                                              1477
                                                                                       435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; carcinoma associated; oncogene; carcinoma; cancer; breast;
prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
                                                                                                                            1418 TTTGGAGCCGCATCACAATACTGGACCTCCCCCACGGGGGAATCTACCCCCAACCCCAAC
                                                                                    418 PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New recombinant nucleic acid encoding carcinoma associated protein, useful for preparing compositions for treating carcinomas.
                                                                                                                                                                                                                                   1478 GTCCCCGCCATCCTAACACCCAGGGCCTTCACACTTAGGCAGCTACTAC 1528
                                                                                                                                                                                                 ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 855 A; 698 C; 680 G; 724 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human FLI1 carcinoma associated cDNA, SEQ ID NO:1209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 1209; 245pp; English.
                                                                                                                                                                                                                                                                                                                                                                        ADA02691 standard; cDNA; 2957 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-DEC-2002; 2002WO-US041414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-DEC-2001; 2001US-00035832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SAGR-) SAGRES DISCOVERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-587068/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003057146-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene; ss.
                                                                                                                                                                                                    436
                                                                                                                                                                                                                                                                                                                                                                                                                                  ADA02691;
                                                                                                                                                                                                                                                                                                           ABAOLAGASALLA AB
                                                                                                                                  d
                                                                              ò
                                                                                                                                                                                              ò
                                                                                                                                                                                                                                               g
```

```
998 ccredaladedededanccadergradearrrecredadecrecredadedededadeded 1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1058 AACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGAGTTCAAAATGACGGACCCCGAT 1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     317
                                                                                                                                         292
                                                                                                                                                                                                                                                                              352
                                                                                                                                                                                                                                                                                                                                          403
                                                                                                                                                                                                                                                                                                                                                                                                        463
                                                                                                                                                                                                                                                                                                                                                                                                                                       118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrThrAsnGluArgArgValileValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258 GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 318 GluvalAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu 337
                                                                                                                                                                                      39
                                                                                                                                                                                                                                                  59
                                                                                                                                                                                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                        66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                       80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                          464 AACCCCATGAACTACAACAGCTATATGGACGAAGAATGGCCCCCCTCCTCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139 ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 159 LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyAlaThrPheilePheProAsnThrSerValTyrProGluAlaThrGlnArgileThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           219 ThrargProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   938 CAACGGCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          278 ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                      21 CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSer
                                                                                                                                                                                                                                                    GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                              60 ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                       100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet
306
57
83
11
 Matches:
Conservative:
Mismatches:
                                              Indels:
Gaps:
                                                                                           (1-2957)
                                                                                             US-09-902-772-2 (1-451) x ADA02691
 1624.50
79.43%
66.96%
66.47%
   Score:
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761
                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

 16 1177	19 357	3A 1237	lu 377	AG 1297	198	AG 1357	ne 417	rc 1417	435	AC 1477			
	SerArgAlaLeuArgTyrTyrTyrAspLy8AsnIleMetThrLy8ValHisGlyLy8Arg	AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGCGAAAGA	TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu	TATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGCTCTGCAGCCACATCCGACGAG	SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro	TCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGCCCACCAG	GlnLysMetAsnPheValAlaProHisProPro	CAGAAGGIGAACTTTGTCCCTCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTC	PhealaalaProAsnProTyrTrpAsnSerProThrGlyGly1leTyrProAsn	TITGGAGCCGCATCACAATACTGGACCTCCCCCACGGGGGAAATCTACCCCAACCCCAAC	ThrargLeuProAlaAlaHisMetProSerHisLeuGlyThrTyr 451	GTCCCCCGCCATCCTAACACCCCACGTGCCTTCACACTTAGGC	
1118	338	1178	358	1238	378	1298	398	1358	418	1418	436	1478	
DÞ	δ	qq	δ ₂	qq	Š	qq	à	q _Q	λ	qu	ò	qq	

Search completed: May 27, 2004, 21:22:13 Job time : 642 secs

```
Command line parameters:
-WODEL=frame+ p2n.model -DEV=x1h
-WODEL=frame+ p2n.model -DEV=x1h
-WODEL=frame+ p2n.model -DEV=x1h
-WO=/Cgn2_1/USPTO_spool/US09902772/runat_27052004_162842_2168/app_query.fasta_1.647
-WO=/Cgn2_1/USPTO_spool/US09902772/runat_STX=p2n.rni -MINNATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -WOTEN=EN NA -OFMT==END=1 -MARTEXTEND=00sum62 -TRANS=numan40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN-0 -ALIGN=10
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN-0 -MAXLEN-200000000
-USR=US09902772 -MOCAN_1 - 169 @runat_27052004 162842 2168 -NOPU=6 -ICPU=3
-NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DBV TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                     May 27, 2004, 20:59:17 ; Search time 128 Seconds (Without alignments) 1955.335 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                     1 MASTIKEALSVVSEDQSLFE.....IYPNTRLPAAHMPSHLGTYY 451
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                Run on:
```

Issued_Patents_NA:*
1: /GGN2_6/ptodate/2/ina/5A_COMB.seq:*
2: /CGN2_6/ptodate/2/ina/5B_COMB.seq:*
3: /CGN2_6/ptodate/2/ina/6A_COMB.seq:*
4: /CGN2_6/ptodate/2/ina/6B_COMB.seq:*
5: /CGN2_6/ptodate/2/ina/PCTUS_COMB.seq:*
6: /CGN2_6/ptodate/2/ina/PCTUS_COMB.seq:*
6: /CGN2_6/ptodate/2/ina/PCTUS_COMB.seq:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

					SUMMARIES	
		dю				
Result		Query				
No.	Score	Match	Match Length DB	DB	ID	Description
г	2444	100.0	1447	m	US-08-878-17-1	Sequence 1, Appli
	2414.5	98.8	1528	m	US-08-878-177-3	Sequence 3, Appli
М	1624.5	66.5	2938	7	US-08-343-443B-3	m
4	511	20.9		m	US-09-360-779-1	٠. ا
S	511	20.9	1752	4	US-09-435-335-1	1
9	449	18.4		Н	US-08-306-691B-43	Sequence 43, Appl
7	449	18.4		ហ	PCT-US93-06251-9	6
æ	445.5	18.2		m	US-09-344-579-1	Sequence 1, Appli
Q	407	16.7		4	US-09-620-312D-869	86
10	342.5	14.0		0	US-08-469-412A-1	'n
11	342.5	14.0		ო	US-09-021-715-1	Sequence 1, Appli
12	322	13.2		ო	US-08-875-944B-1	7

Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 12, Appli Sequence 12, Appli Sequence 14, Appli Sequence 11, Appli Sequence 11, Appli Sequence 11, Appli Sequence 11, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 11, Appli Sequence 6, Appli Sequence 11, Appli Sequence 11, Appli Sequence 4, Appli Sequence 4, Appli Sequence 44, Appli	cken DNA	1447 451 0 0 0		erGluaspGlnSerLeupheGlu 20 	etThralaSerSerSerGlu 40
US-09-116-049-3 US-09-602-868A-1 US-09-303-268-1 US-09-316-049-1 US-09-316-049-1 US-09-316-049-1 US-09-318-925-13-1 US-09-328-925-13-1 US-09-328-925-13-1 US-09-328-925-13-2 US-09-913-3-1 US-09-920-759-10 US-09-920-913-6 US-09-920-913-6 US-09-932-149A-44 US-09-322-149A-44 US-09-322-149A-44 US-09-322-149A-44 US-09-322-149A-44 US-09-322-149A-44 US-09-322-149A-44 US-09-322-149A-44	ene w/ deletion, chi	9 Length: Matches: Conservative: Mismatches: Indels: Gaps:	878-177-1 (1-1447)	GlualaLeuServalvalS 	roHisLeuAlaLysThrGluMetTh
22222200 22222200 22222200 22222222222	ы	19: 2.54e-24 2444.00 2444.00 11cy: 100.00% 1arity: 100.00% 3	(1-451) x US-08-	MetalaserThrileLys(ysAlaTyrGlySerF 5TGCCTACGGATCGC
13 322 13.2 14 322 13.2 16 36 12.5 18 36 12.5 19 36 12.5 19 36 12.5 21 30.5 12.5 22 30.6 12.5 24 30.1 12.3 24 30.1 12.3 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 25 291.5 11.4 26 273.5 11.4 27 273.5 11.4 27 273.5 11.4 28 273.5 11.4 28 273.5 11.4 28 273.5 11.4 28 273.5 11.4 28 273.5 11.4 28 273.5 11.4 28 273.5 10.6 27 273.5 11.4 27 273.5 11.4 27 273.5 11.4 27 273.5 11.4 27 27 27 27 27 27 27 27 27 27 27 27 27 2	NUMBER OF SOFTWARE: SEQ ID NO LENGTH: TYPE: DN ORGANISM	core lilar Simi	US-09-902-772-2	Oy 1 M Db 63 A'	Qy 21 C Db 123 Tr

401 ASDPHEVALABETOHISPROPROALELEUPROVALTHYSERSEFFREEHEALAN	RESULT 2 US-08-878-177-3 'Sequence 3, Application US/08878177 'Patent No. 6284384 'Canapa, Theopaxamion		NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 3 LENGTH: 1528 TYPE: DNA	SM: c-erg gene, chicken DNA 177-3 Scores:	3.74e-246 LENGTH: 152 24145 Matches: 0 milarity: 94.14\$ Conservative: 0 Similarity: 94.14\$ Mismatches: 1 94.14\$ Tidals: 27	.902-772-2 (1-451) x US-08-878-177-3 (1-1528)	Qy 1 MetalaserThrIleLysGlualabeuSerValValSerGluaspGlnSerLeuPheGlu 20	Oy 21 CyshlaTyrGlySerProHisLeuhlaLysThrGluMetThrAlaSerSerSerGlu 40	0y 41 TyrdlydinThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro 60	Oy 61 ProblaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn 80 [Oy 81 SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsnVal 100	Oy 101 GlyMetAsnTyrGlySexTyrMetGluGluLysHisIleProProAsnMetThrThr 120	Qy 121 AsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHisValArg 140	Qy 141 GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe 160
1	101 G 363 G	121 423	Db 483 CAGTGGCTGGAGTGGCAGTGAAGGAGTATGGTCTTCCAGAGGTGGACTTGTTGTTGTTG 542 Cy 161 GlnasnIleaspGlyLysGluLeuCysLysMetThrLysAspAspAspBeGlnArgLeuThr 180 Db 543 CAGAACATTGATGGGAAAGAGTTGTGTAAAATGACCAAAGATGACTTCCAGAGACTCAGG 602	181	201	Qy 221 ProdspleuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr 240	Qy 241 GInSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgPro 260	Qy 261 GInleuaspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaàsnProGlySer 280	Qy 281 GlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsp 300	Oy 301 CysilethrItpGluGlyThrAsnGlyGluPheLysMetThrAspProhspGluValAla 320	Oy 321 ArgargirpGlyGluargLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAla 340	Oy 341 LewargTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyr 360 	Oy 361 LysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMet 380	Oy 381 TyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMet 400

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1442
                                                                                                                                                                                                                                                                                                                                                               1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1262
                                                                                                                                                                                                                                                                                                                     1022
                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                         198
                                                                                                                                                 782
                                                                                                                                                                                                               253
                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                    333
  180
                      602
                                                               662
                                                                                    198
                                                                                                       722
                                                                                                                             213
                                                                                                                                                                       233
                                                                                                                                                                                          842
                                                                                                                                                                                                                                                        273
GCTAGAAACACAGGAGGAGCCACTTTTATTTTTCCAAATACATCAGTTTACCAGAAGCA
                                                                                                                                                                                                            ThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValPro
                                                                                                                                                                                                                                                                                                                                           SerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMet
                                                                                                                                                                                                                                                                                                                                                             1023 TCGGACAGCTCCAACTCCAACTGCATCAGGAGGGACAAAATGGGGGAGTTCAAGATG
                                                                                                                                                                                                                                                                                                                                                                                    ThraspProaspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1383 TCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAATTCACCAACTGGAGGCATCTAC
                                                                                                                                                                       ThrGlnArgIleThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                                                                                                                   ACGCAAAGAATAACAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGG
                                                                                                                                                                                                                                    ACGAGICACAGCCATCCCACTCAGICAAAAGCIACCCAACCATCATCTTCAACAGTGCCC
                                                                                                                                                                                                                                                       LysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSer
                                                                                                                                                                                                                                                                                                   ArgleuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeu
                                                                                                                                                                                                                                                                                                              CGTCTTGCAAATCCAGGGAGTGGGCAGATACAGCTATGGCAGTTCCTACTGGAGCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                             TyrasplysleuSerargalaleuargTyrTyrTyrAsplysAsn11eMetThrLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProValThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr
                                                                                                       CCACATTTGACTTCAGATGATGATGATAAAGGCCTTACAAAACTCTCCACGGTTAATGCAT
                                          ProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg----
                                                              --------GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTGGCACCTACTAC 1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-08-343-443B-3
                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            394
                                                                                                                                                                                                               234
                                                                                                                                                                                                                                     843
                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                                                                                                                                                                                                                                                                334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              434
                                          181
  161
                      543
                                                               603
                                                                                                       663
                                                                                                                                                 723
                                                                                                                                                                       214
                                                                                                                                                                                           783
                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                   274
                                                                                                                                                                                                                                                                                                                       963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                            g
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \stackrel{\diamond}{\sigma}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Д
 8
                                         ò
                                                        Ωp
                                                                           8
                                                                                                 qq
                                                                                                                      ò
                                                                                                                                                                    ò
                                                                                                                                                                                   원
장
                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                        дp
                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

Sequence 3, Application US/0834343B Patent No. 5968734 GENERAL INFORMATION:
APPLICANT: Aurias, Alain APPLICANT: Delattre, Olivier APPLICANT: Melot, Chantal APPLICANT: Melot, Thomas

```
CANCEROUS
                     APPLICANT: Ploougastel, Beatrice
APPLICANT: Thomas, Gilles
APPLICANT: Zucman, Jossica
TITLE OF INVENTION: UCSSICA SSOCIATED WITH THE DEVELOPMENT OF CANCEROU
TITLE OF INVENTION: TRANSLATIONS ASSOCIATED WITH THE DEVELOPMENT OF CANCEROU
TITLE OF INVENTION: TRANSLOCATIONS
TITLE OF INVENTION: TRANSLOC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetAlaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProProAlaArgValThr1leLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2938
306
57
83
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x US-08-343-443B-3 (1-2938)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 19102

COMPUTER READBLE PORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
COMPUTER: ISM PC COMPATIBLE
COMPARE: ABDIT 1.0 DOS text editor
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/34/3,443B
FILING DATE: 18-NOV-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION STAP
APPLICATION NUMBER: PCT/FR93/00494
FILING DATE: 19-NAY-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PS/06123
FILING DATE: 19-NAY-1992
ATTONEY AGENT INFORMATION:
NAME: Weiser, Gerard J.
REGISTRATION NUMBER: 19,763
REGISTRATION NUMBER: 19,763
REGISTRATION NUMBER: 19,763
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 2938 base pairs
Peter, Martine
Ploougastel, Beatrice
Thomas, Gilles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.89e-162
1624.50
79.43*
66.96*
66.47*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
143..1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ,
US-08-343-443B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

9 ASSISTANCE OF THE CONTRIBUTION OF THE CONTRI	Db 1388 TTTGGAGCCCCATCACAATACTGGACCTCCCCCACGGGGGAATCTACCCCCAAC 1447 Qy	APPLICATION PAPELICATION PAPELICATION DATE: PELLING DATE: PELLING DATE: 1 Patentin Vol. 1 1752 NA Rattus noise: 2Y: CDS NN: (112)(1) 779-1 Scores: nilarity: nilarity: nilarity: 1:	0y 229 ValTyrProGlualaThxGlnarglleThrThrArgProAspLeuProTyrGluGlnAla 228 Db 369 GTGCCCCCCGTGCGTCCCCCCATCTCCCACGCCCA
Anserted address and a second a second a second a second address and a second a s		*	
	ASSET GAGGGGAGTATGACCACATGAGGTCCAGG ASSET PROASPASSET VALALYSGLYGLYLYSMET VALSET SET SET SEASPASSE ASSET PROASPASSET VALALYSGLYGLYLYSMET VALSET SET SEASPASSE GAGT CTCCGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrIysAspAspPheGlnArg TTTTCCAGAACATGCAAGGAACTGGTGTAAAATGAACAAGAGGAGACTCCTCCGC LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHiSTyrLeuArgGluArg GCCACCACCCTCTACAACACGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGGAA GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr ::::	ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSer CTGGAAGCGGCCAGTCAGCTGTGGCAATTCCTCCGAGCTGCTCCGACAGCGCC AsnSerAsnCySleThArTrpGluGlyThAsnGlyGluPheLySmetThAspProAsp AcGCCAGCTGTTATCCCTGGGAGGGAACCAACGGGAGTTCAAATGACGGAGTGCTCTCCGAT GluValAlaArgArgTrpGlyGluArgLySSerLySProAsnMetAsnTyrAspLySleu GluValAlaArgArgTrpGlyGluArgLySSerLySProAsnMetAsnTyrAspLySleu GluValAlaArgArgTrpGlyGluArgLySSerLySProAsnMetAsnTyrAspLySleu GluValAlaArgAraTraCTAGGGAGGGAAAGCCCAACATGAATTACGACAGAGTG SerArgAlaLeuArgTyrTyrAspLySasnIleMetThrIysValHisGlyLySArg HILIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIH

S

```
513 GAGCTGGGGGCCG-----CTGAGCCCTGCGGTACAGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셮
SerSerThrValProLysThrGluAspGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        431 ylleTyrProAsnThrArgLeuPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 19102
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 720
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1107 TTCGCACTTGGGGGTCATTAT 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444 oSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-306-691B-43; Sequence 43, Application US/08306691B; Patent No. 5734039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: Two Penn Cent
CITY: Philadelphia
STATE: Pennsylvania
COUNTRY: U.S.A.
249
                                                                                                                                                                                 280
                                                                                                                                                                                                                          552
                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                              453
                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                 원
                                                                                    ઠે
                                                                                                                           ద
                                                                                                                                                                              ઠે
                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                          P
                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                      1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Deneris, Evan S.
APPLICANT: Deneris, Evan S.
APPLICANT: Producto, Dmitty J.
TITLE OF INVENTION: Reagents and Methods for the Screening of Compounds;
TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases;
TITLE OF INVENTION: Useful in the Treatment of Neurological Diseases;
FILE REPERENCE: CASE-040-7;
CURRENT PELICATION NUMBER: US/09/435,335
CURRENT PELICATION NUMBER: 09/360,779
EARLIER APPLICATION NUMBER: 09/360,779
EARLIER PILING DATE: 1999-07-26
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIN Ver. 2.0
SEQ ID NO 1
LENGTH: 1752
                                                                                                                                                                                                                                                  950
                                                                                                                                                                                                                                                                                                                                            666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     452
                                                                                                               384
                                                                                                                                                           911
                                                                                                                                                                                                       oSerAspieu------ProTyrMetSerSerTyrHisAlaHisProGlnLy 399
                                                                                                                                                                                                                                                                                                419
                                                                                                                                                                                                                                                                                                                                                                                     -----ThrGlyGl 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    209 ValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeuProTyrGluGlnAla 228
                                                                   851
                   --ProGluSerSerMetTyrLysTyrPr
                                                                                                                                          912 GGCTGGTCTGGCTCCACTGCCCTTCCCCGGCCTCTCC---------AA
                                                                                                                                                                                                                                                                                              sMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePheAl
                                                                                                                                                                                                                                                                                                                         |-::||| |-::||| |-::||| |-::||| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|| |-::|
                                                                                                                                                                                                                                                                                                                                                                                                                                 431 yileTyrProAsnThrArgLeuPro-------AlaAlaHisMetPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            229 ArgArgSerAlaTrpThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1752
123
23
63
79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GIGCCCCCCGTGCGGTCCCCCCCATCTCCCCAACGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                        419 aAlaProAsnProTyrTrpAsnSerPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-902-772-2 (1-451) x US-09-435-335-1 (1-1752)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1107 Tredeachiggagaereathar 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           444 oSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/09435335 Patent No. 6384204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.84e-44
511.00
50.69%
42.71%
20.91%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: CDS
; LOCATION: (112)..(1131)
US-09-435-335-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                  1 1 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  369
                                                                                                             376
                                                                                                                                                           852
                                                                                                                                                                                                       384
                                                                                                                                                                                                                                                                                                399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                     8 6
                                                                                              ò
                                                                                                                                            d
                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
```

```
1047 generacecasacecesserraseasececerecesseserrassessesseseses 1106
512
                                     280
                                                                       551
                                                                                                         rGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAs 300
                                                                                                                                              611
                                                                                                                                                                                    320
                                                                                                                                                                                                                      671
                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                             731
                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                           791
                                                                                                                                                                                                                                                                                                                                                                                                              375
                                                                                                                                                                                                                                                                                                                                                                                                                                                  851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oSerAspLeu-------ProTyrMetSerSerTyrHisAlaHisProGlnLy 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              431
                                                                                                                                                                                                                                                                                                                                   612 crecardecerdedededecencededearricaadereaceaceaceaceaceaceace
                                                                                                                                                                                                                                                          aArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAl
                                                                                                                                                                                                                                                                                           672 GCGACGCTGGGGCGCGAAGAGCCAATATGAACTACGACAAGCTAAGTCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        376 -----ProGluSerSerMetTyrLysTyrPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            419 aAlaProAsnProTyrTrpAsnSerPro------ThrGlyGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ------AlaAlaHisMetPr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Calabretta, Bruno
APPLICANT: SACREKI, TOMASZ
TITLE OF INVENTION: ANTISENSE
TITLE OF INVENTION: OLIGONUCLEOTIDES TARGETING COOPERATING ONCOGENES
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seidel, Gonda, Lavorgna & Monaco, P.C.
STREET: Two Penn Center, Suite 1800
                                     Glnieu-AspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySe
                                                                                                                                                                                    nCyslleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     399 sMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerSerPhePheAl
```

φ

```
Sequence 9, Application PC/TUS9306251

Sequence 9, Application PC/TUS9306251

GENERAL INFORMATION:
TITLE OF INVENTION: Trivalent Synthesis of Oligonucleotides Containing TITLE OF INVENTION: Stereospecific Alkylphosphonates and Arylphosphonates NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
CITY: Garden City Plaza
STATE: NY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                324 GlyGluargiyeSeriyeProAsnMetAsnTyrAspiysLeuSerArgAlaLeuArgTyr 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344 TyrTyrAspLysAsnIleMetThrLysValHisGlyLysAxgTyrAlaTyrLysPhe--- 362
                                                                                                                                                                                       -----GlnArgProGlnLeuAsp 263
                                                                                                                                                                                                                                                                                                                                                                   284 GinLeuTrpGinPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysileThr 303
                    ---AlaTrpThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSer 250
                                                                                                                                                                                                                                   1164 CCCAACCACAAGCCCAAGGCACCTTCAAGGACTATGTGCGGGACCGTGCTGACTCAAT
                                                                                                                                                                                                                                                                             264 ProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGlyGlnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                       304 TrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363 ---AspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CZETP: 11530

CZETP: 11530

CMPUTER: Floppy disk

COMPUTER: Ploppy disk

COMPUTER: Ploppy disk

COMPUTER: Ploppy disk

COMPUTER: PLAN PC Compatible

COPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NATA:

APPLICATION NATER: PCT/US93/06251

FILING DATE: 19930630

CLASSIFICATION:

ATTORNEY/ACENT INFORMATION:

NAME: D161910, Frank S.

REGISTRATION NUMBER: 31,346

REFERENCE/DOCKET NUMBER: 8586

TELEFONMULICATION INFORMATION:

TELEFAX: 516-742-4346

TELEFAX: 516-742-4366

TELEFAX: 516-742-4366

TELEFAX: 230 901 SANS UR

INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:

SEQUENCE CHARACTERISTICS:

LENGTH: 1064 base pairs
                                                                                                        251 ThrValProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
PCT-US93-06251-9
                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                      ò
                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   iii
864 CICCICCCCCCAAGIAIGAGAAIGACTACCCCICGGICAIICTCCCGAGACCCICTCCAG 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 684 GAIGIGAAACCAIATCAAGITAAIGGAGICAACCCAGCCIAICCAGAATCCCGCIAIACC 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----SerValTyrProGluAlaThrGlnArg 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        924 ACAGACACCTTGCAGAATGACTACTTTGCTATCAAACAAGAAGTCGTCACCCCAGACAAC 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------ThrThrArgProAspleuProTyrGluGlnAlaArgArgSer--- 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                119 ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     179 LeuThrProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGlu--- 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cresceceasacringrassacarcritarssaacarcricrasacarccriscasaasassass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTCGGGACTGGGTGTGTGTGTGTGTATTCAGCCTGAAAGGTGTAGACTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   744 TCGGATTACTTCATTAGCTATGGTATTGAGCATGCCCAGTGTTTCCACCATCGGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---ArgGlyAlaThrPheIlePheProAsnThr----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1604
1114
51
89
122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-902-772-2 (1-451) x US-08-306-691B-43 (1-1604)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
SOFTWARE: WordPerfect 5.1
CURRENY APPLICATION DATA:
APPLICATION NUMBER: US/08/306,691B
FILING DATE: September 15, 1994
                                                                                               PRIOR APPLICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
NAME: MORACO, DAIDEL A.
REGISTRATION NUMBER: 30,480
REFRENCE/DOCKET NUMBER: 30,480
REFRENCE/DOCKET NUMBER: 30,480
TELEPRANCE/DOCKET NO. 5734039e
INFORMATION FOR SEQ ID NO: 43:
ENGURNE CHARACTERISTICS:
LENGTH: 1604 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 208 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..258-37
449.00
43.88%
30.32%
18.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  217 Ile-----
                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        217 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
TOPOLOGY:
US-08-306-691B-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       198
```

QQ à 9 8 g

ò d 8 g ò g Š q ò οg ઠે g ò

8

```
984 ATGTGCATGGGGAGCAGCAGTCGTGGTAAACTCGGGGGCCAGGACTCTTTTGAAAGCATA 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1164 CCCAACCACAAGCCCAAGGGCACCTITCAAGGACTAIGIGCGGGACCGTGCTGACCTCAAI 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  264 ProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGlyGlnIle 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ThrThrArgProAspleuProTyrGluGlnAlaArgArgSer--- 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              232 ---AlaTrpThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSer 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----GlnArgProGlnLeuAsp 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      284 GlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSerAsnSerAsnCysIleThr 303
                                                                                                                                                                                                                                                                 684 GAIGIGAAACCATATCAAGITAATGGAGICCAAGCCIATCCAGAATCCCGCTATACC 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      217
                                                                                                                                                                                                                             447 ACTAAAGAACGAACGACGAGGATCCCAAAAGACCCCCGGCAGTGGACAGAAACCCAT 506
                                                                                                                                                                                                                                                                                                                                                                                 179 LeuThrProSerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGlu--- 197
                                                                                                                                                                                                                                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744 TCGGATTACTTCATTAGCTATGGTATTGAGCATGCCCAGTGTGTTCCACCATCGGAGTTC 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----SerValTyrProGluAlaThrGlnArg 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     864 CTCCTCTCCCTCAAGTATGAGAATGACTACCCCTCGGTCATTCTCCGAGACCCTCTCCAG 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            924 ACAGACACCTIGCAGAATGACTACTTIGCTAICAAACAAGAAGTCGTCACCCCAGACAAC 983
                                                                                                                                                                                                              119 ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                            624 cresceccheaerrrerresseacarcrraressaacarcrassasarecressasaasse 683
                                                                                                                                                                                                                                                                                                                          159 LeupheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAapPheGlnArg
                                                                                                                                                                                                                                                                                                                                            ||| :::::||| ||| :::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     251 ThrValProLys-------------ThrGluAsp------
                                                                                                                                                                                                                                                                                                                                                                                                                                        -----ArgGlyAlaThrPhellePheProAsnThr------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217 Ile------
                                                                                   1604
1114
511
122
9
                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                    US-09-902-772-2 (1-451) x PCT-US93-06251-9 (1-1604)
STRANDEDNESS: double TOPOLOGY: linear MODECULE TYPE: DNA (genomic) PCT-US93-06251-9
                                                                             1.256-37
449.00
43.88%
30.32%
18.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
Percent Similarity:
Best Local Similarity:
Query Match:
                                                                     Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                         198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D
```

	qq	1284	CAGCTATGG	CAGTTTCTTCTGGA	CAGCTAIGGCAGTTTCTTCTGGAATTACTCACTGATAAATCCTGTCAGTCTTTTATCAG	13
	λõ	304		ThrAsnGlyGluPh	TrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrp	323
	q	1344		аатесстессаййт	<u>ĊAAACTTTCTGACCCAGATGAGGTGGCCAGG</u>	AGATGG 1403
	λõ	324		LysSerLysProAs	GlyGluArglysSerLysProAsnMetAsnTyrAsplysLeuSerArgAlaLeuArgTy	ArgTyr 343
	qq	1404		AAAAACAAACCTAA	gaidaattatgagaaactgagccta	decrae 1463
	òé	344	H—F	LysasnileMetTh	YrTyrasplysasnileMetThrlysValHisGlyLysArgTyrAlaTyrlysPhe ::: arnaccanaaaanarcaccacagacaccacaaaacccTrorG	Phe 362 TTGTG 1523
	3	1 0				
	දුරු අ	363 1524	TGT	HisGlylleAla 	GinalaleuGinFrohisFrokrogiu 377 ::: 	
×-	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	S79 NO. AINF	SULT 809-344-579-1 Sequence 1, Application US Patent No. 6054316 GENERAL INFORMATION: APPLICANT: Brenda F. Bake APPLICANT: Lex M. COWSELT	ULT 8 09-344-579-1 equence 1, Application US/09344579 atent No. 6054316 atent NorwATION: APPLICANT: Brenda F. Baker APPLICANT: Lex M. COWSEIT		
	(U)	CEFERI CEFERI CEFERI TOFI	OF INVENTION: ANTISEN REFERENCE: RIS-0063: WT APPLICATION NUMBER: WT FILING DATE: 1999-00 R OF SEQ ID NOS: 47	ANTISENSE MODUL 0063 NUMBER: US/09/3 1999-06-25 : 47	LAILON OF EIS-2 EAFRESSION 344,579	
·	; LENGTH: 2 ; TYPE: DNA ; TYPE: DNA ; FEATURE: ; LOCATION: US-09-344-579	H: 2268 DNA IISM: HOM RE: KEY: CDS TION: (29	268 Homo sapi CDS (291)(1	ens .700}		
	Alignment S Pred. No.: Score: Percent Sim Best Local Query Match	Scores: imilari il Simil	nment Scores: . No.: e: ent Similarity: Local Similarity: y Match:	5.2e-37 445.50 40.96% 130.60% 3	Length: 2268 Matches: 127 Conservative: 43 Mismatches: 105 Indels: 141 Gaps: 14	
	US-09-902	-772	-2 (1-451)	x US-09-344-5	(79-1 (1-2268)	
	ζ	122		ValileValProAl	GluargargVallleValProAlaAspProThrLeuTrpSerThrAspHisValArgGln	
	qq	570		CTGGGCATTCCAAA	ngaacccctgcctgtggagtgagcaacaggta	20
	දු දු	142		TrpalavalLysG TGGGCCACCAATGA	TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhGln 	PheGln 161 TTC 686
	à	162		cj y Lys Gluteucy	AsnileAspGiyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro	ThrPro 181
	Db	687		GGCCAGATGCTGTG	GGCATGAATGGCCAGATGCTGTGTAACCTTGGCAAGGAAGG	GCACCT 746
	, oo	182		AlaAspileLeuLe	SerTyrAsnAlaAsplleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAl	Thr 20
	qq	747		sgrgacaricicre	gactttgtgggtgacattctctggaaacatctggagcaaatgatcaagaaaaccaa	CAA 803
	λ	202	PheIl	ProAsnThrSerVe	ePheProAsnThrSerValTyrProGlualaThrGlnArg1leThrThrArgPro	ArgPro 221
	අ	804		GAAAAGACAGAAGA	ATCARTATGAAGAAAATTCACACCTCACCTC	0
	δλ	222			AspleuProTyr-G1	
	qq	855		PACAGCAATACAT	CATTGGATTAACAGCAATACATTAGGTTTTGGCACAGAGCAGGCGCCCTATGGAATGCAG	ATGCAG 914

ζζ	228	aArghrgSerAlaTrpThrSerHisSerHisProTh 240
Db	915	ACACAGAATTACCCCAAAGGCGGCGTCCTGGACACATGTGTCCGGCCTCCACAGGC 974
ò	240	rGinserbysAlaThrGin
Db	975	GTACTCAGCTCTGAGGAGGTTTCAGATGTTCCCCAAGTCTCGGCTCAGCTCCGTCAGC 1034
δ'n	249	rSerThr 251
QQ	1035	GICACCIACTGCTCTGTCAGTCAGGACTTCCCAGGCAGCAACTTGAATTTGCTCACCAAC 1094
ò	252	ValproLygThrGluds 257
qq	1095	AATTCTGGGACTCCCAAAGAACACGACTCCCTGAGAACGGTGCGGACAGCTTCGAGAGC 1154
δy	257	pGlnArgProGlnLeuAapProTyrGlnIleLeuGlyPro 270
QC	1155	TCAGACTCCCTCCAGTCCTGGAACAGCCAGTCGTCCTTGCTGGATGTGCAACGGGTT 1214
ζŏ	270	270
Db	1215	CCTTCCTTCGAGAGCTTCGAAGATGACTGCAGCCAGTCTCTGCCTCAATAAGCCAACC 1274
δy	271	ThrSerSerArgLeuAlaAsnPro
q _Q	1275	ATGTCTTTCAAGGATTACATCCAAGAGG-AGTGACCCAGTGGAGCAAGCAAACCAGT 1333
δλ	279	randa de de la company d
Dþ	1334	TATACCTGCAGCTGTGCTGGCCGGCTTCACAGGAAGTGGACCTATTCAGCTGTGGCAGTT 1393
οy	288	eLeuleuGluLeuleuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAs 308
ДQ	1394	TCTCCTGGAGCTGCTATCAGACAAATCCTGCCAGTCATTCAT
6٧	308	nGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSe 328
Db	1454	ATGGGAGTTTAAGCTCGCCGACCCCGATGAGGTGGCCCGCCGGCGGGGAAAGAGGAAAA 1513
٥y	328	TLYSProAsnMet AsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrTyrAspLysAs 348
дa	1514	TARGCCCAAGATGAACTACGAGAAGCTGAGCCTTACGCTATTACGAAAAA 1573
ò	348	nlleMetThrLysValHisGlyLysArgTyrAlaTyrLysPhe362
QQ	1574	
δλ	363	AspPheHisGlyIleAlaGlnAlaLeuGlnProHisPr 375
qo	1634	CTTGCTGGGGGTTCACGCCGAGGAACTGCAGCCATCCTGGGCGTCCAGCCGACAC 1690
δλ	375	OProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHi 394
Q _Q	1691	
δ.	394	SAlaHisProGlnLysMetAsnPheValAlaProHisProPro 408
Db	1751	AGCCCATCTGACCAGCTGCCTCCG 1775
O PUTING		

```
426 AsnSerProThrGly 430
à
                          쉱
                                                       ò
                                                                                g
                                                                                                                                            엄
                                                                                                                                                                                                                                                      ď
                                                                                                               ò
                                                                                                                                                                   ઠે
                                                                                                                                                                                                쉱
                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                             RESULT 9
US-00-620-312D-869
19-00-620-312D-869
1 Sequence 869, Application US/09620312D
1 Patent No. 6569662
1 GENERAL INFORMATION:
1 APPLICANT: Tang, Y Tom
1 APPLICANT: Liu, Chenghua
1 APPLICANT: Asundi, Vinod
2 APPLICANT: Zhang, Jie
3 APPLICANT: Chen, Rei, Peiyan
3 APPLICANT: Chen, Rui-hong
4 APPLICANT: Chen, Rui-hong
5 APPLICANT: Zhao, Qing A.
5 APPLICANT: Zhao, Qing A.
6 APPLICANT: Wehrman, Tom
```

```
2073 ACCCTGGAAGAAGAAAAAATGCATGCAGGGACAGATCCAGCTGTGGCAGTTTCTGCTG 2132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2192 TTCAAGCTCACGGACCGGACGAGGTGGCGCGGTGGGGCGAGGCGAAGAGCAAGAGCC 2251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2410 CCCTTCCCCGGCCTCTCC-----2AAACTCAACCTCATGGCC--- 2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2446 ----- 240GCTGGCTGGAGGTCGCGGACGCT---- 2472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               291 GluLeuLeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGlu 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331 AsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrAspLysAsnIleMet 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   388 -----ProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsnPheValAlaPro 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          406 HisproProAlaLeuproValThrSerSerSerPhePheAlaAlaAroAsnProTyrTrp 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1368 ------GACGGCGCTCTACAAGCTGCCGCCGCCGCCGCCTCGACCCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271 ThrSerSerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       311 PheLysMetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           371 LeuGlnProHisProProGluSerSerMetTyrLysTyrProSerAspLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2532
16
23
34
5
APPLICANT: Xue, Aidong J.
APPLICANT: Yang, Yonghong
APPLICANT: Shou, Ping
APPLICANT: Zhou, Ping
APPLICANT: Mang, Jian-Rui
APPLICANT: Mang, Jian-Rui
APPLICANT: Mang, Dinwind
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Zhiwei
APPLICANT: Drmanac, Radoje T.
IITLE OF INVENTION: Polypeptides
FILE REPRENCE: 784CIP2B
CURRENT APPLICATION NUMBER: US/09/620,312B
CURRENT RILING DATE: 2000-07-19
PRIOR FILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: DE F_genes Version 1.0
SEQ ID NO SEQ ID NOS: 1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-902-772-2 (1-451) x US-09-620-312D-869 (1-2532)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
Percent Similarity: 66.67%
Best Local Similarity: 56.97%
Query Match: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: CDS
; LOCATION: (1)..(2532)
US-09-620-312D-869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
```

```
298 snSerAsnCysileThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspG 318
                                                                                                                                              307 Additeccicederrendedecerrecenaerecandececandantancenenaerea
                                                                                                                                                                                                                      367 GCCGGGCCCTGCGCTATTACTATAACAAGCGCATTCTGCACAAGAACCAAAAGGGT
                                                                                                                                                                                                                                                                                                                :: ||||||||||:::||||:::|||427 TCACTACTAGTGCTGGTCAATTACCCATTCATTGATGTGG
                                                                                                                                                                                                                                                                                                                                                                     DOOL -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401 snPheValAlaPro------HisProProAlaLeuProValThrSerSerS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    574 AGGIGCTGICCCCCCCGAGGACCCCCGGTCACCACCAGCCTGCTCTTCATCTTCATCTT
                                                    247 ACCAGGGCGTCATTGCCTGGCAGGGGACTACGGGGGAATTCGTCATCAAAGACCTGATG
                                                                                                 318 luValalaargargTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuS
                                                                                                                                                                                         338 erhrgalareuargTyrTyrTyrTyrAspLysasnileMetThrLysValHisGlyLysArgT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               381 yrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Athanasiou, Meropi A.
Sgouras, Dionyssios N.
TITLE OF INVENTION: The ERF Genetic Locus and Its Products
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CITY: San Francisco CATE: California COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 015280-229000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Falences.

CURRENT APPLICATION DATA:
APPLICATION NUMBER: 08/09/021,715
FILING DATE: 10-Feb-1998
CLASSIFICATION: cUnknown>
ATTORNEY/AGENT INFORMATION:
NAME: Garrett-Wackowski, Eugenia
REFERRACE/DOCKET NUMBER: 015280-229
TELEPHONE: (415) 576-0300
                                                                                                                                                                                                                                                                                      358 yralaTyrLysPheAspPheHis------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Mavrothalassitis, George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            547 regerrecerecereaegeee-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blair, Donald G.
Fisher, Robert J.
Beal Jr., Gregory J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/09021715 Patent No. 6194547 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       634 CCCTCTTCTCGGCT 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  erPhePheAlaAla 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
US-09-021-715-1
                                                                                                                                                                                                                                                                                                                                                                            366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                      g
                                                                                                        ે
                                                                                                                                                 g
                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258 lnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnP 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rodlyserdlydlniledlnLeufrpGlnPheLeuLeuGluLeuLeuSerAspSerSerA 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          crascreaagacagarecagerererecarriranechegagerecreeaagagaga 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 ccessescescescescesancessescerricacessescescescescescentandades 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp--G 258
                                                                                                                                                 APPLICANT: Mayorthalassitis, George J.
APPLICANT: Blair, Donald G.
APPLICANT: Blair, Donald G.
APPLICANT: Beal Jr., Gregory J.
APPLICANT: Beal Jr., Gregory J.
APPLICANT: Aftanasiou, Maropi A.
APPLICANT: Sqouras, Dionyssios N.
ITILE OF INVENTION: The BRF Genetic Locus and Its Products NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Bighth Floor
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: 123..1769
OCTHER INFORMATION: /note= "human ERF (ETS2 Repressor
OTHER INFORMATION: Factor) cDNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2667
884
26
59
38
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMINITY TO SAN A COMMINITY SAN A COMPUTER READABLE FORM:
MEDIUM TYRE: Floppy disk
COMPUTER: ISW PC compatible
COMPUTER: ISW PC compatible
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 05-UN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-902-772-2 (1-451) x US-08-469-412A-1 (1-2667)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY AGENT INFORMATION:
NAME: Garrett-Wackowski, Eugenia
REGISTRATION NUMBER: 37,330
REFERENCE/DOCKET NUMBER: 015280-229000
TELEPHONE: (415) 576-0200
TELEPHONE: (415) 576-0300
INFORMATION FOR SEQ ID NO: 1:
SEGURENCE CHARRATERISTICS:
LENGTH: 2667 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                Sequence 1, Application US/08469412A
Patent No. 5856125
GENERAL INFORMATION:
---TCTCCTACTGGC 2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.72e-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        342.50
53.40%
40.78%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-469-412A-1
                                                                  JS-08-469-412A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local S:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
```

g ò D à d

δ

```
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              erArgAlaLeuArgIyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgT 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381 yrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----TCCG 573
                                                                                                                                                                                                                                                                                               ProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp--G 258
                                                                                                                                                                                                                                                                                                                74 CCGGGAGCCGGGAATCGGGGGGGCTTCGCCCCGGGCCCCCAGCATGAAGACCCC 133
                                                                                                                                                                                                                                                                                                                                                        258 lnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnP 278
                                                                                                                                                                                                                                                                                                                                                                          278 rodlyserGlyglnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerA 298
                                                                                                                                                                                                                                                                                                                                                                                                                                          credericaaegeadarecaderereredecaerrirarecredaderecegaaggageagr 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspG 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        247 ACCAGGGGGTCATTGCCTGGCAGGGGACTACGGGAATTCGTCATGAAGACCTGATG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                luvalalaargargrrpGlyGluargiysSerLysProAsnMetAsnTyrAspiysLeuS 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307 AGGTGGCCGGCTGTGGGGGGTTCGCAAGTGCAAGCCCCAGATGAATTACGACAAGCTGA 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       366 -------GlylleAlaGlnAlaLeuGlnProHisProProGluSerSerMetT 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   487 ggiigecteaggigcaagaccccaaaagaccccaccacaagaccact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        401 snPheValAlaPro--------HisProProAlaLeuProValThrSerSerS
                                                  NAME/KEY: CDS
LOCATION: 123..1769
LOCATION: 123..1769
OTHER INFORMATION: /note= "human ERF (ETS2 Repressor Factor) CDNA"
SEQUENCE DESCRIPTION: SEQ ID NO: 1;
                                                                                                                                                                   2667
2667
2667
2667
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             547 TCCGCTTCCTCAACGCCC-------
                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                     US-09-902-772-2 (1-451) x US-09-021-715-1 (1-2667)
                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   358 yralaTyrLysPheAspPheHis----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/08875944B Patent No. 6096542 GENERAL INFORMATION:
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   634 CCCTCTTCTCGGCT 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     416 erPhepheAlaAla 420
                                                                                                                                                                     5.72e-26
                                                                                                                                                                                   342.50
53.40%
40.78%
14.01%
             TOPOLOGY: linear
MOLECULE TYPE: CDNA
FEATURE:
                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
US-08-875-944B-1
                                                                                                                                                         Alignment Scores:
                                                                                                                          US-09-021-715-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                 187
                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                      ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

```
105 GlyserlyrMetGluGluLysHisIleProProProPspAsnMetThrThrAsnGluArgArg 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----CGCCCTACAGCCCT 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85 CysSerValAlaLysGlyGlyLysMetValSerSerAspAsnValGlyMetAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308 -----TITACTCCAGTGCCTATGACCCCCCCAGACAAATCGCCCATCAAGTCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125 ValileValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248 -------ACCCGGCCTGTCCTGCAGCAGGAAGCCGCCACTCCCCTACC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45 SerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65 ThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2064
129
50
152
137
                                                                                                                                                                                  COMPUTER ENDABLE FORM:

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: Date of the compatible

COMPUTER: O'A LOG | 197

CURRENT APPLICATION NUMBER: US/08/875,944B

FILING DATE: O'A LOG | 1997

CLASSIFICATION NUMBER: US/08/875,944B

PRIOR APPLICATION NUMBER: US/08/875,944B

PRIOR APPLICATION NUMBER: US/07-020173

FILING DATE: O'B-FEB-1995

PRIOR APPLICATION NUMBER: PCT/0796/00016

FILING DATE: O'B-FEB-1995

ATTORNEY/AGENT INFORMATION:

NAME: BROWN: ROGET L.

REGISTRATION NUMBER: 25,618

REFERENCE/DOCKET NUMBER: EUJINAGA=1

TELEPEPONIN: CO20 | 737-3528

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENDTH: 2064 Dase pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-902-772-2 (1-451) x US-08-875-944B-1 (1-2064)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         218 rchagaaggagcccchgagrccccccachg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        359 ccccredracccrradacagr-----
TITLE OF INVENTION: CANCER CONTROL
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK, P
STREET: 624 Ninth Street N.W., S
CITY: Washington
STRIE: D.C.
COUNTRY: USA
  CANCER CONTROL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62e-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 2064 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           322.00
38.41%
27.68%
13.18%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
1..1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                       20001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-875-944B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

APPLICANT: FUJINAGA, Kei APPLICANT: YOSHIDA, Koichi APPLICANT: HIGASHINO, Fumihiro

104 307

84

8 6

장염 જ g 8 6 ઠે ద $\stackrel{>}{\circ}$ 日 ò

ò

```
US-09-902-772-2 (1-451) x US-09-116-049-3 (1-2064)
                                                                                                                                                                                                                                                                                                                                                                                                                   218 rchagaaggagcccchaharccccccchag
:::||| |||
1398 GGCTGTTCCCCCTGCC 1413
                                                                                                                                                                                                                                                                            5.62e-24
322.00
38.41%
27.68%
13.18%
                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                         US-09-116-049-3
                                                                                                                                                                                                                                                                                                                                                                                                                                               65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                              No.:
                                                                                                                                                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            958 CAGCTGTGGCAATTTCTGGTGGCCTTGCTGGATGACCCAACAAATGCCCATTTCATTGCC 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .225 ecciriccegacaarcageerecagircreaggereagirmeaecegeererereageag 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rProSer------AspleuProTyrMetSerSerTyrHisAlaHisProGl 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePh 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr-----ProAsnTh 436
                                                                                                                                                                                                                                                                                                                                                         270
                                                                                                                                                                                                                                                                                                                                                                                                           272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              324 GlyGluArglysSerLysProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyr 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TyrTyrAsplysAsnileMetThrLysValHisGlyLysArgTyrAlaTyrLysPheAsp 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheHisGlyIleAlaGlnAla-LeuGlnProHisProProGluSerSerMetTyrLysTy 383
                  :::
395 TICCCCGGGCAAGCAACGGAATTICCIGAGAICCTCIGGCACCICCCAGCCCCACCCTG 454
                                                   160 PheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeu 179
                                                                                                  ThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGly 199
                                                                                                                            538
                                                                                                                                                   213
                                                                                                                                                                             598
                                                                                                                                                                                                     231
                                                                                                                                                                                                                            658
                                                                                                                                                                                                                                                     237
                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                       257
                                                                                                                                                                                                                                                                                                                                 778
                                                                                                                                                                                                                                                                                                                                                                                 779 CAGAGGGCTTCTCTGGGCCCTCTCCAGGTGACGGGCCCATGGGCTATGGCTATGAGAAAC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                 839 CTCTGCGACCATTCCCAGATGATGTCTGCGTTGTCCCTGAGAAATTTGAAGGAGACATCA 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                            .----SerglyGlnIle 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACCCCTCCCAGCCCTACCAACACAGCTGTCGGAGCCCTGCCCAGCCTATCCCC
 -----LeuProAspValAspIleLeuLeu
                                                                                                                      GCTCCGTCTTCCAGCAGCCCCTGGACATTGCCACTCCTTCACATCTCAGGAGGGGGCC
                                                                                                                                                     ------ValTyrProGluAla
                                                                                                                                                                                                     ThrGlnArglleThrThrArgProAspLeuProTyrGluGlnAlaArgArgSer----
                                                                                                                                                                                                                       AGCAGAGCTITTAAGCAAGAATACCATGATCCCCTGTATGAACAGGGGGGCAGCCG
                                                                                                                                                                                                                                                     ------AlaTrpThrSerHisSer
                                                                                                                                                                                                                                                                              HisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                               719 AACAGACGTCGCCTACGÁCTCÁGATGTCÁCCGGGTGCGCATCAATGTÁCCTCCACA
                                                                                                                                                                                                                                                                                                                                                      GlnArgProGlnLeuAspProTyrGlnIleLeuGlyPro------
                                                                                                                                                                                                                                                                                                                                                                                                         ----Thrser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  899 AGCAGGAAGGGGTCGGT-GCATTTCGAGAGGGCCGCCCTACCAGCGCCGGGGTGCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304 TrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------reincrerereseccesses
                                                                                                                                                   AlaThrPheIlePhePro-----AsnThrSer-
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerArgLeuAlaAsnProGly-
 TrpAlaValLysGluTyrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rArgLeuProAlaAla 441
                                                                           GCCATGGGTACCTCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              284 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1078 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         436
                                                                                                                            479
                                                                                                                                                     200
                                                                                                                                                                             539
                                                                                                                                                                                                     214
                                                                                                                                                                                                                                                       232
                                                                                                                                                                                                                                                                                                       238
                                                                                                                                                                                                                                                                                                                                                                                                           271
                                                                                                                                                                                                                                                                                                                                                                                                                                                            273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                 상 점
                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                - da
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

```
---AlaTrpThrSerHisSer 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----TITACICCAGIGCCIAIGACCCCCCCAGACAAAICGCCAICAAGICCCCTG 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCATGGGTACCTCGGGG-----AACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrproSerTyrAsnAlaAsplleLeuLeuSerHisLeuHisTyrLeuArgGluArgGly 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACCCTCCCAGCCCCTACCAACACAGCTGTCGGAGCCCTGCCCACCCTATCCCC 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200 AlaThrPhellePhePro-----AsnThrSer------ValTyrProGluAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             599 AGCAGAGCTTTAAGCAAGAATACCATGATCCCTGTATGAACAGGCGGGGCCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85 CysserValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGlyMetAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlySerTyrMetGluGluLysHisIleProProProAsnMetThrThrAsnGluArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125 ValilevalproAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             145 TrpalaValLysGluTyrGly-------LeuProAspValAspIleLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            395 ITCCCCGGGCAGAGCAACGGAATTTCCTGAGATCCTCTGGGCACCTCCCAGCCCCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------ACCCGGCCCTGTCCTGCAGGAAGCCGCCACTCCCTACC---
Sequence 3, Application US/09116049A
Patent No. 6248351
GENERAL INFORMATION:
APPLICANT: Hung, Men-Chie
TITLE OF INVENTION: HUMAN PEA3 IS A TUMOR SUPPRESSOR FOR CANCER CELLS
FILE REFERENCE: UTSC:582
CURRENT APPLICATION UNMBER: US/09/116,049A
CURRENT FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3
LENGTH: 2064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   214 ThrGlnArglleThrThrArgProAspLeuProTyrGluGlnAlaArgArgSer--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---ACCATGGCGAGCAGTGCC----
                                                                                                                                                                                                                                                                                                                                                                                                                2064
129
152
152
137
                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
```

```
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
 COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                        LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                    US-09-602-868A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCTGTGGCAATTTCTGGTGGCCTTGCTGGATGACCCAAAAAGGCCCATTTCATTGCC 1017
                                                                                                                                                                                                                                                                                               1138 harrangadaaggcarcargcagaaggreecreereaggcerracgreracaagrrr--- 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125 GCCTTCCCGGACAATCAGCGTCCAGCTCAAGGCTGAGTTTGACCGGCCTGTCAGTGAG 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         383 rproser------AspleuProTyrMetSerSerTyrHisAlaHisProGl 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           398 nLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePh 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418 eAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr-----ProAsnTh 436
                                                 AACAGACGGACTICGCCTACGACTCAGATGTCACCGGGTGCGCATCAATGTACCTCCACA 778
                                                                                           ||||||||
| CAGAGGGCTTCTCTGGGCCCTCTCCAGGTGACGGGCCATGGGCTATGAGAAAC 838
                                                                                                                                                     CICIGGGACCAITCCCAGAIGAIGICIGCGIIGICCCIGAGAAAITIGAAGGAGÁCÁÍCA 898
                                                                                                                                                                               -----SerGlyGlnIle 283
                                                                                                                                                                                                 AGCAGGAAGGGGTCGGT-GCATTTCGAGAGGGCCGCCCTACCAGCGCCCGGGTGCCTG 957
                                                                                                                                                                                                                               GinLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThr 303
                                                                                                                                                                                                                                                                                TrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrp 323
                                                                                                                                                                                                                                                                                                                                    GlyGluArglysSerLysProAsnMetAsnTyrAsplysLeuSerArgAlaLeuArgTyr 343
                                                                                                                                                                                                                                                                                                                                                                                     TyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPheAsp 363
                                                                                                                                                                                                                                                                                                                                                                                                                                       364 PheHisGlyIleAlaGlnAla-LeuGlnProHisProProGluSerSerMetTyrLysTy 383
HisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp 257
                                                                         GlnArgProGlnLeuAspProTyrGlnIleLeuGlyPro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: FUJINAGA, Kei
APPLICANT: YOSHIDA, Koichi
APPLICANT: YOSHIDA, Koichi
APPLICANT: HIGASHINO, Fumihiro
TITLE OF INVENTION: CANCER CONTROL
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
STREET: 624 Ninth Street N.W., Ste. 300
                                                                                                                             SerArgLeuAlaAsnProGly----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09602868A Patent No. 6528310 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1398 GGCTGTTCCCCCTGCC 1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   436 rArgLeuProAlaAla 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington
STATE: D.C.
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
US-09-602-868A-1
                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                             1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1195
                                                                                                                                                                                                                                                                                                           1018
                          238
                                                  719
                                                                                                   412
                                                                                                                           271
                                                                                                                                                       839
                                                                                                                                                                               273
                                                                                                                                                                                                       899
                                                                                                                                                                                                                                284
                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                    324
                                                                           258
                                                                                                                                                                                                                                                                                                                                                                                     8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                  임
                                                                                                                                                                                                                               8 6
                                                                                                                                                                                                                                                                                                  8 B
                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                 දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
 9
                                             9
9
9
                                                                                           d
                                                                                                                           ઠે
                                                                                                                                               g
                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                \delta
                        ò
```

```
------ACCGGCCCTGTCCTGCAGGAAGCCGCCACTCCCCTACC--- 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85 CysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGlyMetAsnTyr 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160 PheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180 ThrproSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGly 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgVal 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105 GlySerTyrMetGluGluLysHisIleProProProAsnMetThrThrAsnGluArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125 ValileValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             479 GCTCCGTCTTCCAGCAGCCCCTGGACATTTGCCACTCCTTCACATCTCAGGAGGGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----ACCATGGCGAGCAGTGCC--------ACCATGGCGAGCAGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ------TITACTCCAGTGCCTATGACCCCCAGAGAAATCGCCATCAAGTCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2064
129
150
137
             OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
PLILICATION NUMBER: US/09/602,868A
PILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2 (1-451) x US-09-602-868A-1 (1-2064)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  218 TCAAGAAGGAGCCCCAGAGTCCCCGCACAG-
                                                                                                                                                                                                                                                                                                                           FUJINAGA=1
                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP96/00016
FILING DATE: 09-JAN-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                           08/875,944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           455 GCCATGGGTACCTCGGGG----
                                                                                                                                                                                                                                                                               NAME: BROWNY, ROGET L.
REGISTRATION NUMBER: 25,618
REFERENCE/DOCKET NUMBER: FUJ.
TELECOMMUNICATION INFORMATION:
TELEPAN: (202) 628-5197
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2064 base pairs
IBM PC compatible
                                                                                                                                                                                                                                                                                                        25,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62e-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 2064 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322.00
38.41%
27.68%
13.18%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single
                                                                                                                    CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: cDNA PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1..1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
```

```
US-09-902-772-2 (1-451) x US-09-884-363-3 (1-2064)
                                                                                                                                                                                                                                                                                                                                                                  Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCATGGGTACCTCGGGG-------
CURRENT APPLICATION NUMBER: US/09/884,363
CURRENT FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: 09/116,049
PRIOR FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 11
SOFWRAKE: Patentin Ver: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    218 rchagaagaagcccchaacrccccccacha
                                                                                                                                                                                                                                                                                                322.00
38.41%
27.68%
13.18%
                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                   LENGTH: 2064
                                                                                                                                                                                                                 US-09-884-363-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        455
                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     С
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  쉽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1225 GCCTTCCCGGACAATCAGCGTCCAGCTCTAAGGCTGAGTTTGACCGGCCTGTCAGTGAG 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1285 GAGGACACAGTCCCTTTGTCCCACTTGGATGAGAGCCCCCGCCTACCTCCCAGAGCTGGCT 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPheAsp 363
                                                                                                                                                                                                                                       718
                                                                                                                                                                                                                                                                                                                       778
                                                                                                                                                                                                                                                                                                                                                                  270
                                                                                                                                                                                                                                                                                                                                                                                                             838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCAGGAAGGGGTCGGT-GCATTTCGAGAGGGCCGCCTACCAGCGCCGGGGGTGCCCTG 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364 PheHisGlylleAlaGlnAla-LeuGlnProHisProProGluSerSerMetTyrLysTy 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  eAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyr-----ProAsnTh 436
                                                                 598
                                                                                                                                                   658
                                                                                                                                                                                            237
                                                                                                                                                                                                                                                                                257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerArgLeuAlaAsnProGly------SerGlyGlnIle 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThr 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ValTyrProGluAla
                                                                                                                                      -------AlaTrpThrSerHisSer
                                                                                                                                                                                                                                     238 HisProThrGlnSerLysAlaThrGlnProSerSerTerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                       AACAGACGACTÍCGCCTACGÁCTCÁGATGÍCÁCGGGTGCGCATCAATGTÁCCTCCACA
                                                                                                                                                                                                                                                                                                                                                                                                           cadadecrincióres contra contra de con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 839 CTCTGCGACCATTCCCAGATGATGTCTGCGTTGTCCCTGAGAAATTTGAAGGAGACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArgTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyGluArglysSerlysProAsnMetAsnTyrAsplysLeuSerArgAlaLeuArgTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rProSer------AspleuProTyrMetSerSerTyrHisAlaHisProGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePh
                                                             GGGAACCCCTCCCAGCCCCTACCAACACACAGCTGTCGGAGCCCTGCCCACCCTATCCCC
                                                                                                          ThrGlnArglleThrThrArgProAspLeuProTyrGluGlnAlaArgArgSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09884363
Patent No. 6582725
GENERAL INFORMATION:
APPLICANT: Hung, Men-Chie
TITLE OF INVENTION: HUMAN PEA3 IS A TUMOR SUPPRESSOR FOR CANCER CELLS
FILE REFERENCE: UTSC:582
                                                                                                                                                                                                                                                                                                                                                                  GlnArgProGlnLeuAspProTyrGlnIleLeuGlyPro-
                         AlaThrPheIlePhePro----AsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1398 GGCTGTTCCCCCTGCC 1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      436 rArgLeuProAlaAla 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418
                                                                                                                                                                                                                                                                                                                                                                                                             779
                                                                                                                                                                                            232
                                                                                                                                                                                                                                                                                                                       719
                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                      271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엺
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Бb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                      g
                                                                                                 පු පු
                                                                                                                                                                                 ò
                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                8
```

```
GlySerTyrMetGluGluLysHisIleProProProAsnMetThrThrAsnGluArgArg 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125 ValileValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGlu 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180 ThrproSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGly 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         538
                                                                                                                                                                                                              64
                                                                                                                                                                                                           45 SerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgVal
                                                                                                                                                                                                                                                                                                      65 ThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----TITACTCCAGTGCCTATGACCCCCCAGACAAATCGCCATCAAGTCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359 CCCCTGGTGCCCTTGGACAGT-----CGCCCTACAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          :::
395 TTCCCCGGGGAGAGCAACGGAATTTCCTGAGATCCTCTGGGCACCTCCCAGCCCCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #479 GCTCCGTCTTCCAGCACCCTGGACATTTGCCACTCCTTCACATCTCAGGAAGGGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200 AlaThrPheIlePhePro-----AsnThrSer------ValTyrProGluAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gegnacecercendéééeernacenáchééénéresegnecersecencéérarece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrGlnArg1leThrThrArgProAspLeuProTyrGluGlnAlaArgArgSer----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------AlaTrpThrSerHisSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnArgProGlnLeuAspProTyrGlnIleLeuGlyPro----------
                                                                                                                                                                                                                                                                                                                                                                                              85 CysSerValAlaLysGlyGlyLysMetValSerSerAspAsnValGlyMetAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                             2064
129
50
152
137
Length:
Matches:
Conservative:
Mismatches:
```

478

231 658

									•	
er 272 	le 283 :: TG 957	hr 303	rp 323	Yr 343 AC 1137	18p 363	TY 383 :: TG 1224	Gl 398 :: AG 1284	Ph 418 3CT 1344	1Th 436 AGC 1397	
Thrser AGGAGACATCA	-Serglyglnile ccgggargcccrg	snCysile: :: ATTTCATT	laArgArg: ccAGGCTC	laLeuArg:	yrLysPhei ACAAGTTT	MetTyrLy: ::: CTT	AlaHisPro CTGTCAGTO	SerSerPh :: CAGAGCTG	ProAsi TAGCCCC	
	SerArgLeuAlaAsnProGlySerGlyGlnIle	GlnleuTrpGlnPheleuleuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThr	TrpGluGlyThrAsnGlyGluPheLysWetThrAspProAspGluValAlaArgArgTrp 	GlyGluargLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyr	TYTTYTABDLYSASNIleMetThrLygValHisGlyLysArgTyrAlaTyrLysPheAsp 	PheHisGlyIleAlaGlnAla-LeuGlnProHisProProGluSerSerMetTyrLysTy ::	rProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGl:	nLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerSerPhePh	eAlaala ProAsnProTyrTrpAsnSerProThrGlyGly1leTyrProAsnTh	
GTCCCTGAG	accacce.	rAspSerSer() :	rAspProA	rasplysli CGACAAGC	BGlyLysA: ::: TGGTGAGC	isProPro	YrMetSer ::: .GGCTGAGT	laLeuPro GAGCCCCG	hrglygly AGGGTGGC	
TCTGCGTT	CGAGAGGG	Leubeuse TTGCTGGA	LysMetTh ::: AAGCTCAT	MetAsnTy :argaarra	LysvalHi BAAGGTGGC	auGlnProH	pLeuProT AGCTCTCAA	BProProA	anSerProT GGCCCCA	
	rogly	euleuGlu ::: TGGTGGCC	slygluPhe \rGGAGTTC	JysProAsr ::: :GGCCAGCC	emetThr arcargcad	3lnAla-Le :: GTGTG1	CAGCGTCCA	lalaProHi : TTGTCCCAG	OTYTTTDAE	a 441
ACCATTCC	SerArgLeuAlaAsnProGly AGCAGGAAGGGGTCGGT-GCATT	TGINPhel	YThrasnC	GLYBSerl :: :::: AGAAGAACC	spLysAsn: - GAAAGGC	lyIleAlaC	GGACAAT	AsnPheva:	ProAsnPro	rArgleuProAlaAla ::: GGCTGTTCCCCCTGCC
CTCTGCG	SerArgle	GlnLeuTr CAGCTGTC	TrpGluG] TGGACGGC			PheHisG		nLysMet) :::: GAGGACA(_	-
271	273	284 958	304	324	344	364	383	398	418	436 1398
ري و و	ري و م	S S	č d	٠ م م	දු දු	Oy Db	25 26	<u>ک</u> و	& લ	Ç. Dp
	~ -1	, ,		*				·	_	

Search completed: May 27, 2004, 23:58:56 Job time : 149 secs

```
Sequence 41, Appl
Sequence 1127, Appl
Sequence 1124, Appl
Sequence 1124, Appl
Sequence 1124, Appl
Sequence 1126, Appl
Sequence 126, Appl
Sequence 137, Appl
Sequence 137, Appl
Sequence 137, Appl
Sequence 126, Appl
Sequence 1693, Appl
Sequence 1693
         Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA; ORGANISM: C-11 gene, c-erg gene w/ deletion, chicken DNA US-09-902-772-1
9 US-09-902-772-1

13 US-10-911-462-41

13 US-10-211-462-41

15 US-10-205-98-1127

15 US-10-205-98-1124

15 US-10-205-82-98

16 US-10-005-482-1124

17 US-10-052-482-1124

18 US-10-052-482-1126

19 US-10-052-482-1126

11 US-10-052-482-1126

12 US-10-052-482-1126

13 US-10-052-482-1126

14 US-10-052-482-1126

15 US-10-052-482-1126

16 US-10-052-482-1126

17 US-10-052-482-1126

18 US-10-052-482-1126

19 US-09-864-76-18410

10 US-09-938-779-54

10 US-09-938-779-54

10 US-09-938-779-54

11 US-09-938-779-54

12 US-09-938-779-54

13 US-09-938-779-54

14 US-09-945-77106

15 US-09-948-76-1166

16 US-10-1122-3144

17 US-10-1122-3147

18 US-09-94-51-1166

19 US-09-94-51-1166

10 US-09-94-51-1166

10 US-09-94-51-1166

11 US-10-033-528-1716

12 US-10-033-528-1716

13 US-10-033-528-1693

14 US-10-033-528-1693

15 US-10-033-528-1693

15 US-10-033-528-1693

15 US-10-033-528-1693

15 US-10-099-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693

15 US-10-098-926-1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-037-270-869
US-10-117-722-869
US-09-805-020-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-925-300-420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.57e-269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    472
73725
72732
549
420
454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1752
1752
1752
380
1496
1602
1602
4991
2269
                                                                                        Alignment Scores:
Pred. No.:
                                                                                                                                                 2182
2057
1624.5
1624.5
1624.5
1624.5
1613.5
956.5
949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    948
833 853
813.5
813.5
813.5
650
650
650
650
650
650
650
650
8638
8638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Command line parameters:

-MODEL=frame+_p2n.model -DEV=xlh
-Q=Con2_1/USPTO_spool/VSP3992027Z/runat_27052004_162843_2259/app_query.fasta_1.647
-Q=Con2_1/USPTO_spool/VSP3992027Z/runat_27052004_162843_2259/app_query.fasta_1.647
-DB=Published_Applications_NA_-OFMT=fastap_-SIFFIX=p2n.rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi_LIST=45 -DOCALDIGN=200 -THR SCORE=pct -THR MAX=100
-TRANS=human40.cdi_LIST=45 -DOCALDIGN=200 -THR SCORE=pct -HEAPSIZE=500 -MINLEN=0
-TRR MIN-0 -ALIGN=15 -MODE=LOCAL -UNTRMT=pct -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US99902772_@CGN 1 1 481 @runat 27052004_162843_2259
-NOCHG -ICCPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOGK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPOR=10 -XGAPOR=10 -YGAPOR=10 -YGAPOR 
                                                                                                                                                                      // Search time 668 Seconds
(without alignments)
3071.189 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                   .....IYPNTRLPAAHMPSHLGTYY 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published Applications NA:*

1. /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2. /cgn2_6/ptodata/2/pubpna/PCD7_PUB PUB.seq:*
3. /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
4. /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5. /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
6. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
7. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
8. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12. /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
13. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
14. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
15. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
16. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
16. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
16. /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
17. /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
18. /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
19. /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
19. /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
19. /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
         GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                      using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2960401 segs, 2274450654 residues
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Maximum Maximu

Database :

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Total number

Searched:

2444 1 MASTIKEALSVVSEDQSLFE.

BLOSUM62

Scoring table:

US-09-902-772-2

Perfect score:

Title:

Sequence:

Xgapop 10.0 , Xgapext Ygapop 10.0 , Ygapext Fgapop 6.0 , Fgapext Delop 6.0 , Delext

May 27, 2004, 22:55:58

nucleic search,

protein

. . .

Run ĕ

SUMMARIES

Query Match Length DB

Score

o N

Result

	Db 1143 AAATTTGATTTCCAGGGAATGGCTCAGGCCCTCCAGCCTCACCCTCCAGAATCATG 1202 Oy 381 TyrLySTyrProSerAspleuProTyrMetSerSerTyrHisAlaHisProGlnLySMet 400	1263 AACTITGTAGCTCCCCATCCCCTTTTGCCCGTAACCTCATCCAGCTTTTTTTGCTGCCCTAACCTCATCCAGCTTTTTTTT	Oy 441 AlaHisMelFroSerHisLeuGl/ThrTTyTyr 451	i Kaisha, 5001 tion Suppressi	FILE REFERENCE: COMPAN SERVICE AND SOLD CURRENT APPLICATION WOMER: US/09/902,772 ; CURRENT FILING DATE: 2001-07-12 ; FRICK APPLICATION NUMBER: US/08/878,177 ; FRICK FILING DATE: 1997-06-18) NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 3 TENGTH: 15.8		Alignment Scores: Pred. No.: Pred. No.: Score: Score: Percent Similarity: Best Local Similarity: 94.14* Mismatches: Query Match: 98.79* Gaps: 1	US-09-902-772-2 (1-451) x US-09-902-772-3 (1-1528) QY	Oy 21 CysAlaTyrGlySerProHisLeuhlaLysThrGluMetThrAlaSerSerSerSerGlu 40	Db 183 TAIGGGCAAACATCAAAGATGAGGCCCGGGGTTCCCCAGGGGGGGG	
Score: Score: Score: Best Local Similarity: 100.00% Conservative: Ouery Match: 100.00% Mismatches: Ouery Match: 9 US-09-902-772-2 (1-451) x US-09-902-772-1 (1-1447) Oy 1 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspQlnSerLeuPheGlu 20	Db 63 ATGGCAAGCATTATCAGTGGTGAGTGAGTGAGTGAGTCCTTGTTTGAG 122 Qy 21 CysalaTyrGlySerProHisLeualaLygThrGluMetThrAlaSerSerSerGlu 40 Db 123 TGTGCCTACGGATCGCCCACCTTGCAAAGACAGAAATGACAGCCTCCTTCTCCAGTGAA 182	Oy 41 TyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro 60 183 TATGGGCAAACATCAAAGATGGCCGCGCGCGCTTCCCCCAGCAGGCTTATCACAGCCC 242 Oy 61 ProAlaArgValThrIleLysMetGluCysAsnBroAsnGlnValAsnGlySerArgAsn 80 Db 243 CCGGCCAAAGTTAACATTAAAATGAGTGTAACCCAAACCAGATTATAAGGGTCAAGAGTAAACAGATTAACATTAAAATGAGTGTAACCCAAACCAAACCAGATTAAAGATGAGTGTAAACAGTAAACCCAAAACCAAACCAGATTAAAATGAGTAAAACAGATTAAAACCCAAAACCAAAACAGATTAAAATGAGAGTAAAACAGATTAAAACAGATTAAAACAGATTAAAACCCAAAACCAAAACAGATTAAAACAGAATAAAACAGATTAAAACAGATTAAAAACAGATTAAAACCCAAAACCAAAACAGATTAAAAATAAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAACAGATTAAAAAAAA	Oy SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal 100 101	4 — A	Oy 141 GINTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe 160	Oy 161 GlnasnileaspglylysgluleucyslysMetThrlysaspaspPheGlnargleuThr 180	Oy 181 ProSerTyrasnalaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAla 200	Oy 201 ThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArg 220	ysalathrGlnProSerSerSerthrValProLysthr 		Oy 301 CysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAla 320	

Oy 102 MetAsnTyrGlySerTyrMetGluGluLysHisIlePro	394 HisalahisProGlnLysMetAsnPheValalaProHisProProAlaLeuProValThr 413
Oy 82 ProAspAspCysSerValAlaLysGlyGlyLysMetVal	374 Hisproproglusersermettyrlysflyrproseraspleuprofyrmetserserfyr 393
Qy 62 AlaArgValThrIleLy8MetGluCy8AsnProAsnGln	354 HisGlyLyBargTyrAlaTyrLyBPheAspPheHisGlyIleAlaGlnAlaLeuGlnPro 373
Qy 42 GlyGlmThrSerLysMetSerProArgValProGlnGlnGln [334 TyrasplysLeuSerargalaLeuargTyrTyrTyraspLysAsnileWetThrLysVal 353
Oy 22 AlaTytGlySerProHisLeuAlaLysThrGluMetThr	314 ThraspproaspgluvalalaargargTrpGlyGluargLysSerLysproasnMetasn 333
Oy 2 AlaSerThrileLysGluAlaLeuSerValValSerGlu	294 SerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMet 313
. 13 72-2 (1-451) x US-10-211-46	274 ArgieualaAsnProGlySerGlyGlnileGinLeuTrpGlnPheLeuLeuGluLeuLeu 293
2182.00 milarity: 91.72% Similarity: 88.67% h: 89.28%	254 LysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSer 273
-211-462-41 ment Scores:	234 ThrserHisserHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValPro 253
141 1389. A Homo sabiens	214 ThrGllargileThrThrArgProAspLeuProTyrGluGlnalaArgArgSerAlaTrp 233
; PRIOR APPLICATION NUMBER: US 60/334,244 ; PRIOR FILING DATE: 2001-11-29 ; NUMBER OF SEQ ID NOS: 230 . CORPURER: Defently Ver. 2.1	199GlyAlaThrPhellePheProAsnThrSerValTyrProGluAla 213
; PRIOR APPLICATION NUMBER: US 09/791,390 ; PRIOR FILING DATE: 2001-02-22 ; PRIOR APPLICATION NUMBER: US 60/310,025 ; PPIOR PTILING DATE: 2001-08-03	198 198 198 198 198 198 198 198 198 198
	181 Prosertyrasnalaaspileleuleuserhisleuhistyrleuarggluarg 198
APPLICANT: MILE OF BIOLOGIACO AND APPLICANT: PARTICIONIS METHODS OF DIAGNOSIS OF ANGIOGO ATTLE OF INVENTION: METHODS OF Screening for Angiogo ATTLE OF INVENTION: METHODS OF SCREENING FOR ANGIOLOGIACO ATTLE PERFORMANCE. ALSO AND ANGIOLOGIACO ATTLE PERFORMANCE. ALSO AND ANGIOLOGIACO ATTLE PERFORMANCE. ALSO AND ANGIOLOGIACO ATTLE PERFORMANCE. ALSO ANGIOLOGIACO ATTLE PERFORMANCE. ALSO ANGIOLOGIACO ATTLE PERFORMANCE.	161 GlnasnileaspGlyLysGluLeuCysLysMetThrLysaspAspPheGlnargLeuThr 180
	141 GINTEPLEUGLUTEPALAVALLYSGLUTYEGIPPEUEVCASPVALASPITELEULEUPHE 160
RESULT 3 US-10-211462-41 ; Sequence 41, Application US/10211462 ; Publication No. US20040033495A1 ; GENERAL INFORMATION:	121 ASIGIUARGARGVAIIIEVAIPROALAASDPROTIKLEUTRDSERTIKASDHISVALARG 140
Qy 434 ProAsnThrArgLeuProAlaAlaHisMetProSerHisl	GlymetasntyrGlysertyrmetGluGluLysHislleProProProAsnmetThrThr 12
Qy 414 SerSerPhePheAlaAlaProAsnProTyrITpAsn6 Db 1383 TCATCCAGCTTTTTTGCTGCCCCTAATCCATACTGGAAT	81 SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnVal 100

nralasersersersergluTyr 41 roproproasmetThrThrAsn 121 nAspTrpLeuSerGlnProPro 61 alSerSerSerspasnvalGly 101 UASPGINSerLeuPheGluCys 21 ogenesis, Compositions and jiogenesis Modulators

```
3,17e-239
2182.00
91,72%
88.67%
89.28%
                                                                                                                                        TYPE: DNA
CRGANISM: Homo sapiens
US-10-087-192-1127
                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   385
                                                                                                                                                                                                                                                                                                                                                                  145
                                                                                                                                                                                                                                                                                         25
                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                      205
                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                            265
                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 565
                                                                                                                                                                                                                                                                                                                                                42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                     ਨੇ
                                                                                                                                                                                                                                                                                                                         8 & 8
                                                                                                                                                                                                                                                                                                                                                                               र्छ हि रू
                                                                                                                                                                                                                                                                                                                                                                                                                                    원
장
명
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            $ 8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                              1149
                                                                                                                                                                                                                                                                                                                                                                                             970 ATGACGGATCCCGACGAGGTGGCCCGGCGCTGGGGAGAGGGGAAGAGCAAACCCAACATG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1210 TATCACGCCCACCCACAGAAGATGAACTTTGTGGCGCCCCACCCTCCAGCCCTCCCCGTG 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1270 ACATCTICCAGTITITITIGCTGCCCCAAACCCATACTGGAATTCACCAACTGGGGGGTATA 1329
                                                                                                                                                                                                                                                                                                                                                                           313 MetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln 372
                                                                                                                                                                                                                          252
                                                                                                                                                                                                                                                               272
                                                                                                                                                                                                                                                                                849
                                                                                                                                                                                                                                                                                                   292
                                                                                                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                                                                                                          696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         392
                                                      504
                                                                                                                               624
                                                                                                                                                                   699
                                                                                                                                                                                      233
                                                                                                                                                                                                        729
                                                                                                                                                                                                                                            789
                                                                                                                                                                                                                                                                                                                                       LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle 432
                 444
                                    161
                                                                        181
                                                                                                            201
                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1330 TACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTACTAC 1386
                                  1150 CCCCACCCCCGGAGTCATCTCTGTACAAGTACCCTCAGACCTCCGGTACATGAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
           GAGCGCAGAGTTATCGTGCCAGCAGATCCTACGCTATGGAGTACAGACCATGTGCGGCAG
                                                                                  SerTyrksnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr
                                                                                                                          AGCTACAACGCCGACATCCTTCTCTCTCCCACTACCTCAGAGAGTCCCTCTTCCA
                                                                                                                                                             CATITG------ACTICA-----GAIGAIGAIGATAAAGCCTTACAAAACTCTCCA
                                                                                                                                                                                                 CGGTTAATGCATGCTAGAAACACAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGG
                                                                                                                                                                                                                         ThrSerHisSerHisProThr -- - GlnSerLysAlaThrGlnProSerSerSerThrVal
                                                                                                                                                                                                                                                                                                              AGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTTGGCAGTTCCTCCTGGAGCTC
                                                                                                                                                                                                                                                                                                                                                  910 CTGTCGGACAGCTCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGAGGAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCCATGGGAAGGGCTACGCCTACAAGTTCGACTTCCACGGGATCGCCCCAGGCCCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer
                                                                        AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro
                                                                                                                                                                                   ------AspienProTyrGluGlnAlaArgArgAralaTrp
                                                                                                                                                                                                                                          730 Accestraceccacccaceccaceccaaacerecraaccarerecracaague
                                                                                                                                                                                                                                                                                                   SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu
                                                                                                                                                 PhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
US-10-087-192-1127
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
                385
                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                      353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  413
                                   142
                                                     445
                                                                       162
                                                                                         505
                                                                                                                               565
                                                                                                                                                 202
                                                                                                                                                                   625
                                                                                                                                                                                                        670
                                                                                                                                                                                                                         234
                                                                                                                                                                                                                                                                                790
                                                                                                                                                                                                                                                                                                  273
                                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                                       293
                                                                                                            182
                                                                                                                                                                                    222
           Ωp
                                  8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ हे ठ
```

; Sequence 1127, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:

141 444 161 504 181 564 201 264 101 324 121 384 624 221 699 144 204 41 84 61 81 TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGln SerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsnValGly CCTGATGAATGCAGTGTGGCCAAAGGCGGGAAGATGGTGGGCGGAGCCCAGACACGTTGGG AsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro AACATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCC AGCTACAACGCCGACATCCTTCTCTCACATCTCCACTACAGAGAGACTCCTCTCCA PhellePheProAsnThrSerValTyrProGluAlaThrGlnArglleThrThrArgPro AlaSerThrileLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys GCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGAGTGT GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro MetasnTyrGlySerTyrMetGluGluLysHisIleProProAsnMetThrThrAsn 1389 407 14 14 14 APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: CANCER FILE REFERENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT FILING DATE: 2002-03-01
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR RILING DATE: 2000-12-22
PRIOR RILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 2059
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 112 FOR Length:
Matches:
Conservative:
Mismatches:
Indels: US-09-902-772-2 (1-451) x US-10-087-192-1127 (1-1389) CATTIG-625 셤

```
AsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrPro 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerTyrAsnAlaAspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ::: ::: |||||| | CATITGA.----GAIGAIGITGAIAAAGCCITACAAAACTCTCCA 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cecrraarecarecraeaacacaeatriracearareaeceareaeaececeaeaeareaeceae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281 GCAGCTCATATCAAGGAAGCCTTATCAGTTGTGAGTGAGGACCAGTCGTTGTTTGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   761 AACATCGATGGGAAGGAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42 GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProAspAspCysSerValAlaLysGlyLysMetValSerSerSerAspAsnValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PhellepheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22 AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 GCCTACGGAACGCCACACCTGGCTAAGACAGAGATGACCGCGTCCTCCTCCAGCGACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 AlahrgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetAsnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 GluargargValIleValProAlaAspProThrLeuTrpSerThrAspHisValArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------AspleuProTyrGluGlnAlaArgArgSerAlaTrp
                                                                                                                                                                                                                                                                                            3166
4407
144
144
44
                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-902-772-2 (1-451) x US-10-205-823-98 (1-3166)
PRIOR FILING DATE: 2001-08-22
PRIOR APPLICATION NUMBER: 60/325,020
PRIOR FILING DATE: 2001-09-25
PRIOR PELICATION NUMBER: 60/341,746
PRIOR PILING DATE: 2001-12-12
PRIOR APPLICATION NUMBER: 60/362,158
PRIOR PILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                            1.08e-238
2182.00
91.72%
88.67%
89.28%
                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-205-823-98
                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                               SEQ ID NO 98
LENGTH: 3166
                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         926
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 98 Application US/10205823

| Sequence 98 Application US/10205823
| Publication No. US20030108963A1
| GENERAL INFORMATION:
| APPLICANT: Schlegel, Robert
| APPLICANT: Endege, Wilson O. APPLICANT: Ganavarapu, Manjula APPLICANT: Hoersch, Sebastian
| APPLICANT: Monsey, Angela M. APPLICANT: Monsey, Angela M. APPLICANT: Anderson, Dustin APPLICANT: AND AND TITLE OF INVENTION: NOTEL GENES, COMPOSITIONS, RITS, AND TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, FILE REFERENCE: MRI-044
| CURRENT APPLICATION NUMBER: US/10/205,823 CURRENT FILING DATE: 2001-07-25
| PRIOR APPLICATION NUMBER: 60/314,356
                                                                                                                                                                                                                                                                                                                                                                                             1030 AACTACGATAAGCTCAGCCGCCCTCCGTTACTACTATGACAAGAACATCATGACCAAG 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1090 GTCCATGGGAAGCGCTACGCCTACAGTTCGACTTCCACGGGATCGCCCAGGCCCTCCAG 1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1270 ACHICHICHITITITITICCCCCCCCAACCCCATACTIGGAATTCACCAACTGGGGGTATA 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCACCCCCGGAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCC 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATCACGCCCACCCACAGAAGATGAACTTTGTGGCGCCCCACCCTCCAGCCCTCCCCGGTG 1269
                                                                                                                                                                                                                                                            606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlylleAlaGlnAlaLeuGln 372
                                                                                                                                                                                     849
                                                                                                                                                                                                                       SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292
                                                                                                                                                                                                                                                                                              312
                                                                                                                                                                                                                                                                                                                    CTGTCGGACAGCTCCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAG 969
                                                                                                                                                                                                                                                                                                                                                                      332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle 432
     233
                                      729
                                                                           252
                                                                                                             Accestracescoaccoaccoaccoacteaaacciscorcaaccarcicorricacacias 789
                                                                                                                                                ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer 272
                                                                                                                                                                                                                                                                                                                                                                                                                                             333 AsnīyrAsplysleuSerArgAlaleuArgTyrTyrTyrAsplysAsnIleMetThrLys 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1330 TACCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGGCACTTACTAC 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyr 451
                                                                                                                                                                                                                                                                                                                                                                  313 MetThraspProAspQluValAlaArgArgTrpQlyGluArgLysSerLysProAsnMet
                                                                                                                                                                                                                                                    850 AGCCGCCTTGCAAATCCAGGCAGTGGCCAGATCCAGCTTTGCCAGTTCCTGGAGCTC
       ----AspleuProTyrGluGlnAlaArgArgSerAlaTrp
                                    670 CGGTTAATGCATGCTAGAAACACAGATTTACCATATGAGCCCCCCAGGAGATCAGCCTGG
                                                                                                                                                                     CCCAAAACTGAAGACCAGCGTCCTCAGTTAGATCCTTATCAGATTCTTGGACCAACAAGT
                                                                                                                                                                                                                                                                                              LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys
                                                                         ThrSerHisSerHisProThr --- GlnSerLysAlaThrGlnProSerSerSerThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
US-10-205-823-98
                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                 910
                                                                                                                                                                                                                                                                                                                                                                                                        970
                                                                           234
                                                                                                             730
                                                                                                                                                                                     290
                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                              293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                g
                                                                         à
                                                                                                    g
                                                                                                                                            8
                                                                                                                                                                             S
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

21

400

61

41

520

81

580

121 640 141 700 161 760

101

820

880

Score: 2182.00 Matches: 407 Percent Similarity: 91.72\$ Conservative: 14 Best Local Similarity: 88.67\$ Mismatches: 24 Query Match: 89.28\$ Indels: 14 DB: 15 Gaps: 4 US-09-902-772-2 (1-451) x US-10-021-660-26 (1-3166)	Oy 2 AlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys 21	Qy 22 AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyr 41	Oy 42 GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro 61	Qy 62 AlaArgValThrIleLysMetGluCysAsnPrOAsnGlnValAsnGlySerArgAsnSer 81	Oy 82 ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly 101	Oy 102 MetAsnTyrdlyserTyrMetGluGluLysHisIleProProAsnMetThrThrAsn 121	Oy 122 GluargargVallleValProalaAspProThrLeuTrpSerThrAspHisValArgGln 141	Oy 142 TrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGlu 161	Oy 162 AsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrFro 181 Db 761 AACATCGATGGGAAGTGTGCAAGATGACCAAGGACTTCCAGAGGCTCACCCC 820	182 SETTYRASHALAASDILELEULEUSERHISLEUHISTYLLEUARGGIUARGGIYAIATHY 821 AGCTACAACGCCGACATCCTTCTCCCACTCCACTCCTCCACACAGGACTCCTTCCA 202 PHEILEPHEPROASHTHISERVAITYFROGIUAIATHIGINALGIIETHTHIARGED 212
Qy 234 ThrSerHisSerHisProThrGlnSerLysAlaThrGlnDroSerSerSerThrVal 252 Db 986 ACGGTCACGGCCACGCCCAGGCGAAAGCTGCTCAACCATCTCCTTCCACAGTG 1045 Qy 253 ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer 272 Db 1046 CCCAAAACTGAAGACCAGCGTCCTCAGTTAACAGATTCTTGGACCAACAAGT 1105	Oy 273 SerArgLeualaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292	Qy 293 LeuSerAspSerSerAsnSerAsnCys1leThrTrpGluGlyThrAshGlyGluPhelys 312 Db 1166 CTGTCGGACGCTCCAACTCCAGCTGCATCACCTGGGAAGGCACCAACGGGAATTCAAG 1225	Qy 313 MetThrAspProAspGluValAlaArgArgTrpGlyGluArgLySSerLysProAsmMet 332	Qy 333 ASNIYYASPLYSLeuSerArgAlaLeuArgTYxTYrTYrT8FPLYSASNI1eMetThrLys 352 	Qy 353 ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln 372	Qy 373 ProHisProProGluSerSerMetTyrLysTyrProSerAspleuProTyrMetSerSer 392	Qy 393 TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412	Qy 413 ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle 432	Qy 433 TyrProAsnThrArgLeuDroAlaAlaHisMetProSerHisleuGlyThrTyrTyr 451	SEQUENCE 56.26 Sequence 26, Application US/10021660 Sequence 26, Application US/10021660 Sequence 26, Application US/10021660 Sequence 26, Application US/10021660 Sequence 26, Application US.003015226A1 GENERAL INFORMATION: OUR SEQUENCE SIGNATION: Susan R. APPLICANT: Marray, Richard APPLICANT: Marson, Susan R. APPLICANT: Glynne, Richard APPLICANT: Glynne, Richard APPLICANT: Glynne, Richard APPLICANT: Glynne, Richard APPLICANT: Marson, Susan R. TITLE OF INVENTION: Compositions and Methods of Screening for Angiogenerate OF INVENTION: Modulators TITLE OF INVENTION: Modulators FILE REFERENCE: 018501-0071045 FILE REFERENCE: 018501-0071045 FILE REFERENCE: 2001-12-06 PRIOR APPLICATION NUMBER: US/09/784,356 PRIOR APPLICATION NUMBER: US/09/784,356 PRIOR APPLICATION NUMBER: US 09/637,977 PRIOR FILING DATE: 2000-08-11 SOUTHARE: FastSEQ 1D NOS: 135 SEQ 1D NO 26 LENGTH: 3166 TYPE: DNA ORGANISM: Homo sapiens -10-021-660-26 ignment Scores: 1.08e-238 Length: 3166

421

166 481

126 361

106

98

301

186

198

199

661

219

721

727

727

```
CIGIACAAGIACCCCTCCGACCTGCCAIAGAGCTCCTAICACGCCCACCCCAGAAG 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTCGGCGCTGGGGGGGAGGAAGAGCAAGCCCAACATGAACTATGACAAGCTCAGCGG 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhePheAla 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           220 ArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisPro 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240 ThrGlnSerLysAlaThrGlnProSerSerThrValProLysThrGluAspGlnArg 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyriyspheAsppheHisGlylleAlaGlnAlaLeuGlnProHisProProGluSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLys
                                                                                                                                                                                                                                                                                                                    ------garcerraceagarecressaceaceagrasecerrecraarecager
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluVal
                                                                                                                                                        TyrMetGluGluLysHisIleProProAsnMetThrThrAsnGluArgArgVallle
                                                                                                                                                                                                                                       ValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGluTrpAla
                                                                                                                                                                                                                                                               GTCCCTGCAGATCCTACTCTGTGGAGCACAGACCATGTCCGACAGTGGCTGGAGTGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         602 GACGITGATAAGGCTITACAAACTCTCCACGGTTAATGCATGCCAGAAACACAGGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgileThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       662 GCAGCTTTTATTTTCCCAAATACTTCAGTATATCCCGAAGCTACGCAAAGAATTACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320 AlaargargIrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArg
                           ValAlalysGlyGlyLysMetValSerSerAspAsnValGlyMetAsnTyrGlySer
                                                                                                260 ProglnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGly
67 LysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAspCysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       722 AĠĠĊĊA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       187 IleLeuLeuSerHisLeuHisTyrLeuArgGluArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                 87
                                                                                                                                                                                                     302
                                                                                                                                                                                                                                              127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                     242
                                                                                                                                                                107
                                                                                                                                                                                                                                                                                    362
                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ර් සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                    g
                                                                                 ઠ્ઠ
                                                                                                             a
                                                                                                                                                    \dot{\delta}
                                                                                                                                                                                          ద
                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                         જે
                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                    1345
                                                                                                                                                                                  1405
                                                                                                                                                                                                                                                  1406 CCCCACCCCCGGAGTCATCTCTGTACAAGTACCCCTCAGACCTCCCGTACATGGGCTCC 1465
                                                                                                                                                                                                                                                                                                                                                                                                                                1585
                                                                                                                                                                                                                                                                                                                             413 ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGly11e 432
                                                                352
                                                                                                                                           ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGln 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                        TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgValThrlle
                                                              333 AsniyaaspiyaleuSerargalaleuArgiyriyriyriyraspiyaasnileMetihilistas | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 | 1986 |
                                                                                                                                                                       1346 GTCCATGGGAAGCGCTACGCCTACAGTTCGACTTCCACGGGATCGCCCAGGCCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlualateuSerValValSerGluaspGlnSerLeuPheGluCysAlaTyrGlySerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGCCTTGTCAGTTGTGAGCGAGCACCAGTCACTATTTGAGTGTGCCTACGGAACGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1124, Application US/10087192
| Sequence 1124, Application US/10087192
| Publication No. US20020182586A1
| GENERAL INFORMATION:
| APPLICANT: MOTENTIS, David W. APPLICANT: Engelhard, Eric K. | TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR FILE REFERENCE: 529452000122 | CURRENT FILING DATE: 2002-03-01 | PRIOR FILING DATE: 2002-03-01 | PRIOR PILING DATE: 2000-12-22 | PRIOR PILING DATE: 2000-103-02 | PRIOR PILING DATE: 2000-03-02 | PRIOR FILING DATE: 2000-03-02 | SPRIOR FILING DATE: 2001-03-02 | SPRIOR PILING DATE: 2001-03-02 | SPRIOR DATE: 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2 (1-451) x US-10-087-192-1124 (1-1297)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.74e-225
2057.00
83.69%
81.36%
84,17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
CORGANISM: Mus musculus
US-10-087-192-1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -10-087-192-1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                             353
                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                            393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               영 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6 8
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                         g
                                                                                                                                                                                                           장염
                                                                                                                                                                                                                                                                                                        \overset{\sim}{\delta}
                                                                                                                                                                                                                                                                                                                                      g
                                                              à
                                                                                       성유
```

1018

319

898

778 299

셤

셤 ò a

જે

```
1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             946 GAGGTGGCCAGGCGCTGGGGGGGGGGGAAAGCAAGCCCAAGCTGAATTACGACAAGCTG 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerargalaLeuargTyrTyrTagDysAsnIleMetThrLysValHisGlyLysArg 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyralaryrLysPheAspPheHisGlyIleAlaGlnAlareuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  945
                                                                                                                                                                                                                                                            645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProglySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     882
                                                                                                                                                                                                                                                                                                 219 ThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis 238
                                                                                                                                                                                                                                                                                                                                                                                257
                                                                                                                                                                                                                                                                                                                                                                                                        AsnSerasnCys11eThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluvalalaargargTrpGlyGluargLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerSerMet TyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    766 caacedecceaeaarceerarcacarceraeeceraeceaecaeaeaeacaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1006 Adcodecercentrarracrardarahahahaharahirandakerdekedekahahah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuThrProSerTyrAsnAlaAsp11eLeuLeuSerHisLeuHisTyrLeuArgGlüArg
                                                                                                                                                                ---AGITCACTGCTGGCCTATAATACAACCTCCCACACGACGAATGCTCACGATTGATGGT
                                                                                                                                                                                                                                                                                                                                                                                239 ProThrGlnSerlysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlylleTyrProAsn-----
                                                                                                472 ITITICCAGAACAIGGAIGGCAAGGAACIGIGIAAAAIGAACAAGGAGGACIICCICCGC
                                                                                                                                                                                                                      GlyalaThrPhellePheProAsnThrSerValTyrProGlualaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                               LeupheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
10-10-052-482-197
10-10-052-482-197
10-10-052-482-197
10-10-052-482-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
10-052-197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1066
                                                                                                                                                                                                                                                                                                                                                                                                                             904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358
                                                                  159
                                                                                                                                             179
                                                                                                                                                                                                                                                                 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                      유 상 R
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            දු දු
                                                                                                                                8 8 8
                           6 음
                                                                                              셤
                                                                                              ThrThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100 ValGlyMetAsnTyrGlySerTyrMetGluGluLy8His---IleProProAsnMet 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 CysalaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
      AlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuPro
                                                                                                                                                                                                                                                            Sequence 198, Application US/10052482
; Sequence 198, Application US/10052482
; Publication No. US20040072264A1
; GENERAL INFORMATION:
APPLICANT: Morris, Exic
APPLICANT: Morris, David
; ITLE OP INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
FILE REFERENCE A-7108/7kmS/DCF
CURRENT APPLICATION NUMBER: US/10/052,482
CURRENT FILING DATE: 2002-08-15
; PRIOR FILING DATE: 2000-12-22
; PRIOR PILING DATE: 2000-12-22
; PRIOR PILING DATE: 2000-03-02
; NUMBER OF SEQ ID NOS: 241
; SEQ ID NO 198
; SEQ ID NO 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1359
306
57
57
111
                                                                                                                                                                    AlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-902-772-2 (1-451) x US-10-052-482-198 (1-1359)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.87e-175
1624.50
79.43%
66.96%
66.47%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CRGANISM: Homo sapiens
US-10-052-482-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                              RESULT 8
US-10-052-482-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
                                                                                                                                                 440
                             1139
                                                                    420
```

g 8 S

ò

8 8 8

8 & 8

8 8 8

g

σ

```
878 TCTGGCCTCAACAAAGTCCTCCCCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAG 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 710, Application US/10342887
Publication No. US20040058340A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-342-887-710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores
                                                             278
                                                                                                      298
                                                                                                                                               318
                                                                                                                                                                   1118
                                                                                                                                                                                                                               358
                                                                                                                                                                                                                                                                                           1298
                                                                                                                                                                                                                                                                                                               398
                                                                                                                                                                                                                                                                                                                                                        418
                                                                                                                                                                                                                                                                       378
                                       g
                                                       ð
                                                                               g
                                                                                                    ò
                                                                                                                    셤
                                                                                                                                              ò
                                                                                                                                                              셤
                                                                                                                                                                                ઠે
                                                                                                                                                                                                       셤
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                                                                   118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp 257
                                                                                                                                                                                                                                                                                                                                              352
                                                                                                                                                                                                                                                                                                                                                                                      403
                                                                                                                                                                                                                                                                                                                                                                                                                            104 GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               583
                                                                                                                                                                                                                                                    292
                                                                                                                                                                                                                                                                                                                         GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln 59
                                                                                                                                                                                                                                         1 MetalaSerThrIleLysGlualaLeuSerValValSerGluaspGlnSerLeuPheGlu 20
                                                                                                                                                                                                                                                                                  CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSer 39
                                                                                                                                                                                                                                                                                                                                                                   79
                                                                                                                                                                                                                                                                                                                                                                                                         80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerBerAspAsn 99
                                                                                                                                                                                                                                                                                              ThrThrAsnGluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       139 ValargGlnTrpLeuGluTrpAlaValLvgGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159 LeuPheGlnAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Grcaaagaagacctrcriargacrcagrcágaagaggagcrrgggggaaraacargaar
                                                                                                                                                                                                                                                                                                                                       60 ProproAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                   100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyalaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                              2957
306
57
83
11
                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                      JS-09-902-772-2 (1-451) x US-10-052-482-197 (1-2957)
 CURRENT FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR PELING DATE: 2001-03-02
PRIOR PILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 241
SEQ ID NO 197
LENGTH: 2957
                                                                                                                                               5.93e-175
1624.50
79.43%
66.96%
66.47%
                                                                                            TYPE: DNA
CORGANISM: Homo sapiens
US-10-052-482-197
                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        219
                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    761
                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                          \dot{\delta}
```

```
1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1297
                                                                                                                                                                                                                                         1117
                                                                                                                                                                                                                                                                                                                                                                                            GAGGTGGCCAGGCGCTGGGCGGAAAAGCAAGCCAACATGATTACGACAAGCTG 1177
                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         435
                                                                                        297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TyralaTyrLysPheaspPheHisGlyIleAlaGlnAlaLeuGlnProHisProBroGlu 377
                                        997
                                                                                                                                                                                                                                                                                              337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Mao, Mao
APPLICANT: Mac, Mao
APPLICANT: Noberts, Christopher J.
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Van 't Veer, Marc J.
APPLICANT: Van 'de Vijevr, Marc J.
APPLICANT: Van de Vijevr, Marc J.
APPLICANT: Dermards, Rene
FILE REFERENCE: 9301-189-999
CURRENT FILING DATE: 2003-01-15
PRIOR FILING DATE: 2002-05-14
PRIOR FILING DATE: 2002-05-14
PRIOR FILING DATE: 2002-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1358 CAGAAGGTGAACTITGTCCCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGGCTTC
                                     938 CAACGGCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAAC
                                                                                           ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                           AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1238 TATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGCTCTGCAGCCACATCCGACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1418 TTTGGAGCGGGATCACAATACTGGACTCCCCCACGGGGGAATCTACCCCAACCCCAAC
                                                                                                                                                                                                                      GluvalAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
258 GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
```

8

g y 임 d

8 6

\$ B \$

중 점

2 8 2 8

장 쉽

8 8

ò Dp 8

8 & 8

8 6 ፟

8 8 8

6 6 6 6

```
### PROBLICANT: BERTUCCI, FRANCOIS
### APPLICANT: BERTUCCI, FRANCOIS
### APPLICANT: BERTUCCI, FRANCOIS
### APPLICANT: BERTUCCI, FRANCOIS
### APPLICANT: BIRNBAUM, DANIEL
### APPLICANT: BIRNBAUM, DANIEL
### APPLICANT: WINSW, PATRICE
### APPLICANT: WINBER: US/10/007,926A
### CURRENT APPLICATION NUMBER: US/254,090
### PRIOR PATRICE
### PATRICE PATRICE
### PATRICE
### PATRICE
### APPLICANT: WINBER: US/254,090
### APPLICANT: WINBER: US/254,090
### APPLICANT: WINBER: US/254,090
### APPLICANT: US/254,090

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---CAGTGAGGGTCAACGTCAAGCGGGAGTAT-----GACCACATGAATGGATCCAG 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGTCTCCGGTGGACTGCAGCGTTAGCAATGCAGCAAGCTGGTGGGCGGAGGCGAGTCC 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProProAsnMet 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn 99
                                                                           1358 CAGAAGGTGAACTTTGTCCTCCCATCCATCCTCCATGCTGTACATTCCTCCAGCTTC
                                                                                                                                                                                                                           1418 TITGGAGCCGCATCACAATACTGGACCTCCCCCACGGGGGGAATCTACCCCAACCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MetAlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173 Ariogacogogácitárita Agogácici circició circició de de de contra de cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233 TCAGCGTACGGAGGGGGGAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProproAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                         GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                  PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                                                                                                                                                                                                                                                                                      436 ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
1478 GTCCCCGGCCATCCTAACACCCACGTGCCTTCACACTTAGGCAGCTACTAC 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
O'THEN INFORMATION: friend leukemia virus integration 1 (FLI1)
O'THEN INFORMATION: gene.
US-10-007-9264-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2957
306
57
83
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-902-772-2 (1-451) x US-10-007-926A-295 (1-2957)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 295, Application US/10007926A
Publication No. US20030143539A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.93e-175
1624.50
79.43%
66.96%
66.47%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-007-926A-295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                     398
                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . No. .
                                                                                              엄
                                                                                                                                                                              ö
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGGTGGCCAGGCGCTGGGGGGGGAAAAGCAAGCCCAACATGAATTACGACAAGCTG 1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccregaagcgggcagarccagcrgrgscaarrccrccrggagcrgcrcrccgacagcgcc 1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1178 AGCCGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGGCAAAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerArgAlaLeuArgTyrTyrAypLysAsnIleMetThrLysValHisGlyLysArg 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro 397
                                                                                                                                            352
                                                                                                                                                                                                                                                                                                                                                                                                  GAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAGCAGTGGTGGGCGGAGCCGAAGTCC 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   297
                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProThrGlnSerLysAlaThrGln---ProSerSerThrValProLysThrGluAsp 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAACGGCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAAC 997
                                                                       59
                                                                                                                                                                                                                79
                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
TCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 GCCACCACTACAACACGGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT
                                                                GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCACCAACGAGGAGGAGAGTCATCGTCCCCGCAGACCCCACCACTGTGGGACACAGGAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITITCCAGAACATGGATGGCAAGGAACTGTGTAAAAATGAACAAGGAGGACGTTCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761 -- AGTTCACTGCTGCCTATAATACAACCTCCCACACCGACCAATCCTCACGATTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGGCCTCAACAAAGTCCTCCCCTTGGAGGGCACAAAAGATCAGTAAGAATACAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                    40
                                                                                                                                        293
                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            378
                                                                                                                                                                                                                                                                                    353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             119
```

292

59

39

352

```
179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAsp1leLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            159 LeupheGinasnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199 GlyalaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 CyshlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Thr.Thr.AsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetalaSerThrIleLysGlualaLeuSerValValSerGluaspGlnSerLeuPheGlu
Sequence 195, Application US/10052482
Publication No. US20040072264A1
GENERAL INFORMATION:
APPLICANT: Morifs, Eric
APPLICANT: Morifs, David
ITILE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
FILE REPERENCE: A.71087/KMS/DCF
CURRENT APPLICATION NUMBER: US/10/052,482
CURRENT APPLICATION NUMBER: US/20/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
NUMBER OF SEQ ID NOS: 241
SOFTWARE: PatentIn version 3.1
SEQ ID NO 195
LENGTH: 1359
                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-902-772-2 (1-451) x US-10-052-482-195 (1-1359)
                                                                                                                                                                                                                                                                                                     3.39e-174
1613.50
78.99%
66.74%
12.02%
                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                              US-10-052-482-195
                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     119
                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITGGAGCCGCATCACAATACTGGACCTCCCCCAGGGGGAATCTACCCCAACCCCAAC 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGTGGCCAGGCGCTGGGGGGGGGAAAAGCAAGCCCAACAAGAATTACGACAAGCTG 1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCGGGCCCTCCGTTATTACTATGATAAAACATTATGACCAAAGTGCACGGCAAAAGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rarectracaaartreactrecacecarreccaeecreaecrerecaeccacreae 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       435
                                                                                                                                                                                                                                                                              218
                                                                                                                                                                                                                                                                                                                                       238
                                                                                                                                                                                                                                                                                                                                                                                                                                                       277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe 417
                                                                                                                                                                                                                                                                                               ---AGTICACTGCTGGCCTATAATACAACCTCCACACCGACCAATCCTCACGATTGAGT 817
                                                                                                                                                                                                                                                                                                                                                       997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg 357
    AACCCCATGAACTACAACAGCTATATGGACGAGAAGAAGAATGGCCCCCCTCCTCCCAACAACAG 523
                                              Thr.ThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                     ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu 158
                                                                                                                      179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                              239 ProThrGlnSerLysAlaThrGln---ProSerSerSerThrValProLysThrGluAsp 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAAGGTGAACTTTGTCCCTCCCCATCCATCCATCCATGCCTGTCACTTCCTCCAGCTTC
                                                                                                                                                                                   644 ITITICCAGAACAIGGAAGGAACIGITITITITITITICAACAAGGAGGACTICCTCCGC
                                                                                                                                                                                                                                       TCTGGCCTCAACAAAAGTCCTCCCCTTGGAGGGGCACAAAAGGATCAGTAAGAATACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCTAGCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACGCCAGCTGTATCACCTGGGAGGGACCAACGGGGAGTTCAAAATGACGGACCCCGAT
                                                                  ACCACCAACGAGAGGAGGAGTCATCGTCCCGGAGACCCCCACACTGTGGACACAGGAGGAT
                                                                                                                                                            LeuPheGlnAsnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                              GlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                     ThrargProaspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---ThrargleuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-10-052-482-195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1418
                   464
                                                                           524
                                                                                                      139
                                                                                                                                                              159
                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 436
                                               119
                                                                                                                                                                                                                                                                                                         191
                                                                                                                                                                                                                                                                                                                                       219
                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                            2 d y d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         정
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                        d
                                                                                                     8 6
                                                                                                                                                           ò
                                                                                                                                                                                8 8
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                           8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                         8
```

9 20

1359 305 56 85 11

9

180

59

231

79

138

411

471

531

218

351

291

9 9 ℅ Вb $\overset{\sim}{5}$ g

```
1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProThrGlnSerLysAla -- - ThrGlnProSerSerSerThrValProLysThrGluAsp 257
                                                                                                                                                                            304
                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                  424
                                                                                                                                                                                                                                                                                                                                                            475
                                                                                                                                                                                                                                                                                                                                                                                                                         535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrThrAsnGluArgArgValileValProAlaAspProThrLeuTrpSerThrAspHis 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuThrProSerTyrAsnAlaAspileLeuteuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
O
                                                                                                                                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                20
                                                                                                                                                                                                            39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      219 ThrargProaspLeuProTyrGluGlnAlaargargSeralaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 Cysalaryrgly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSer
                                                                                                                                                                                                                            40 GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                         60 ProProAlaArgValThrIleLySMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                            ---ccagraadadrcaargrcaadcogdadrar----gaccacargaargdarccag
                                                                                                                                                                                                                                                                                                                                                                                                80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                                                        176 GAGTÓTÓCGGTGGACTGCAGTGTCAGCAAATGTAACAAGCTGGTGGGGGGAGGGGGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          536 AACCCCATGAACTATAATAGCTACATGGATGAGAAGAAGAAGGCCCCCCTCCTCCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139 ValargGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuPheglnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       776 GCCACCTCCGCCTACAACACACAGAAGTGCTGTTGTCGCACCTCAGTTACCTCAGGGAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199 GlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             258 GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1010 cadcoccocadarcertarcadarcerdogoccaaccagegegegeaaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MethlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       278 ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
            1729
305
56
85
111
            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                     x US-10-052-482-194 (1-1729)
              4.84e-174
1613.50
78.99%
66.74%
66.02%
                                                                                                                     US-09-902-772-2 (1-451)
                                           Percent Similarity:
Best Local Similarity:
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      298
                                                                        Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                   ò
                                                                                                                                                                             ď
                                                                                                                                                                                                               à
                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1245
                                                                                                                                                                                                                                                                                                                                                                                                                             1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1125
                                                                                                                                                                                                                                                                                                                                                                 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     945
                                                                                                                                                                                                                                                                                                                                                                                                                                                           377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          435
                                                                                                                                                                                                                                                                                                                                                                                              338 SerargAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLy8ValHisG1yLysArg 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro 397
                                                                                                                                                   277
                                                                                                                                                                                825
                                                                                                                                                                                                                                            885
                                                                                                                                                                                                                                                                         317
                                                                                                                                                                                                                                                                                                                                    337
   645
                                                           705
                                                                                          257
                                                                                                                      765
                                                                                                                                                                                                               297
                                                                                                                                                                                                                               CCTGGGAAGTGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAAACTACTGTCCGACAGCGCC
                                                                                                                                                                                                                                                                                            886 AACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCTGAT
                                                                                                                                                                                                                                                                                                                                    GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                                                      946 GAGGTGGCCAGGCGCTGGGGAAGAGCGAAGAGCCCCAACATGAATTATGACAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                      1006 AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAAGTGCATGGCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .oss raidccracaadrindactrccarddanidercaaddccracacacacacaad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GinLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-----
 ---AGTICACTGCCTGCCTATAACACAACCTCCCATACAGACCAGTCCTCACGACTGAAT
                                                   GICAAGGAAGACCCITCITATGACTCTGTCAGGAGGAGGAGCATGGAACAATAATATGAAC
                                                                                        ProThrGlnSerLysAla -- - ThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                                                           TCTGGCCTCAAAAGTCCTCTCCTTGGAGGATCACAGACCATGGGCAAGAACACTGAG
                                                                                                                                                   GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSer
                                                                                                                                                                                                                                                                          AsnSerAsnCys1leThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu
                              ThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 194, Application US/10052482
| Publication No. US20040072264A1
| Publication No. US20040072264A1
| GANERAL INFORMATION:
| APPLICANT: Engelhard, Eric
| APPLICANT: Engelhard, Eric
| APPLICANT: Morris, David
| TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
| FILE REPERRICE: A-71087/RMS/DCF
| CURRENT APPLICATION NUMBER: US/10/052,482
| CURRENT APPLICATION NUMBER: US 09/747,377
| PRIOR PILING DATE: 2000-18-22
| PRIOR PILING DATE: 2000-11-22
| PRIOR FILING DATE: 2010-03-02
| NUMBER OF SEQ ID NOS: 241
| SEQ ID NO 194
| SEQ ID NO 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
CORGANISM: Mus musculus
US-10-052-482-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-10-052-482-194
                                                                                                                                                                                                                                                                                                                                                                                                                                                             358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       436
                                                                                                                                                                                                               278
                                                                                                                                                                                                                                          826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418
                                                                                        239
                              219
                                                           646
                                                                                                                     904
                                                                                                                                                   258
                                                                                                                                                                                                                                                                          298
                                                                                                                                                                                                                                                                                                                                    318
```

g ò g

상염

रुं व

ò Db $\dot{\delta}$ a

ð

ò

qq

d

ò

g

ò

```
Search completed: May 28, 2004, 01:33:43 Job time : 799 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202225 CTAC 202228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        450 rTyr 451
                                                                                                                                                                                    330
                                                                                                                                                                                                                                            350
                                                                     290
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                       d
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                            \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
            8
                                   셤
                                                             8 8 8
                                                                                                                                                 g
                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201568 TGCAGCTGAGGGATGGACGGACAGGCCTGAAGGGAATGTGGGCGGCGCAATAGC 201627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1549
                                                                                                                                                                                         1430 CAGAAGGTGAACTTTGTCCCGTCTCACCATCCTCCATGCCTGTCACCTCCTCCTCCAGCTT 1489
                                                                                1250 AGCCGGGCCCTCCGATACTACTATGACAAAACATTATGACCAAAAGTGCATGGCAAAAGG 1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ...-----LeuAspProTyrGlnIleLeuGlyPr 270
                                                                                                                                                                                                                               417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnAlaArgArgSerAlaTrpThrSer-HisSerHisProThrGlnSerLysAlaThr-- 245
                                                                                                             358 TyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu 377
                                                                                                                                                                                                                                                                                       PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----- 435
                     1190 GAGGIGGCCAGGCGCTGGGAGAGGGGGAAGAAGCCCAACAIGAATTATGACAGCTG
                                                                                                                              1310 TATGCCTACAAGTTTGACTTCCATGGCATTGCCCAGGCCCTGCAGCACTCCAACAGAG
                                                                                                                                                                                                                                                                                                              1490 TITGGAGCATCACAATACTGGACCTCCCCCACTGCTGGGATCTATCCAAACCCCAGT
GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                     378 SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                               398 GiniysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 --GlnProSerSerSerThrValProLysThrGluAspGl
                                                                                                                                                                                                                                                                                                                                                                 436 ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                            COSTING APPLICATION US/10087192
Sequence 1126, Application US/10087192
Sequence 1126, Application US/10087192
Sequence 1126, Application US/10087192
Sequence 1126, Application US/10087192
SEQUENCE INVENTION: David W.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: OANCER.
FILE REFERENCE: 529452000122
CURRENT FILING DATE: 2002-03-01
PRIOR PELICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR PELING DATE: 2000-103-02
SUPTUMBER OF SEQ ID NOS: 2069
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1126
LINGHH: 212231
TYPE: DNA
SORANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-902-772-2 (1-451) x US-10-087-192-1126 (1-212231)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nArgProGln------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9.05e-96
956.50
79.75%
76.03%
39.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-10-087-192-1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OKGANISM: HOMO
US-10-087-192-1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        227
                                                                                                                                                                                                                                                                                         418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   246
318
                                                       338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                     엄
                                               8 B 8
                                                                                                                              දු දු
                                                                                                                                                                                         셤
                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                à
```

```
201864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202165 GGGTATATACCCCCAACACTAGGCTCCCCACCAGCCATATGCCTTCTCATCTGGGCACTTA 202224
201628 ACCICCIICCGICAICACAGAGAGCCICIIIICCCCIGGAACCIGIG----CICACIGGAGI 201684
                                                                                                           201744
                                                                                                                                                                                                                       201804
                                                                                                                                                                                                                                                                                                                                                                                                                                              201924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    370
                                                                                                                                                                                                  202045 GGGCTCCTATCACGCCACCCACACAAGATGAACTTTGTGGCGCCCCCACCCTCCAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202105 CCCCGTGACATCTTCCAGTTTTTTTGCTGCCCCAAACCCCATACTGGAATTCACCAAACTGG
                                                                                                                                                                                                                                                                                                                               oAsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tThrLysValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201925 GACCAAGGTCCATGGGAAGCGCTACGCCTACAAGTTCGACTTCCACGGGATCGCCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           430 yGly11eTyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTy
                                                           270 oThrSerSerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLe
                                                                                                           201685 TITCCITCCICTCCTGACCICATIAGGCAGIGGCCAGAICCAGCITIGGCAGIICCTCCI
                                                                                                                                                                    uGluLeuLeuSerAspSerSerAsnSerAsnCyslleThrTrpGluGlyThrAsnGlyGl
                                                                                                                                                                                                                                                                             310 uPheLysMetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysPr
                                                                                                                                                                                                                                                                                                                                                                                                                                              201865 CAACATGAACTACGATAAGCTCAGCCGCCCCTCCGTTACTACTATGACAAGAACATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     370 aleuGlnProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 390 tSerSerTyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                410 uProvalThrSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGl
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

May 27, 2004, 20:54:02; Search time 3644 Seconds (without alignments) 3695.896 Million cell updates/sec 1 MASTIKEALSVVSEDQSLFE........IYPNTRLPAAHMPSHLGTYY 451 nucleic search, using frame_plus_p2n model US-09-902-772-2 2444 Title: Perfect score: protein Sequence: Run on: δ

27513289 segs, 14931090276 residues 2007 Xgapop 10.0 , Xgapext (Ygapop 10.0 , Ygapext (Fgapop 6.0 , Fgapext Delop 6.0 , Delext **BLOSUM62** Scoring table: Searched:

55026578 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

em gas inv. . . . em gas inv. . . . em gas vrt . . . em gas fun . . em gas fun . . . 1: em_estba:.*
2: em_esthum:.*
4: em_esthum:.*
5: em_estCov:.*
6: em_estCov:.*
7: em_estCov:.*
10: gb_est1:.*
11: gb_htc:.*
11: gb_htc:.*
11: gb_est2:.*
11: gb_est3:.*
11: gb_est5:.* em_estfun:* em_estom:* EST:* Database :

gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		Query	-	1	;	1	
. OZ 1	SCORE	March	Length	בי		4 1	
г	68	ω.	90	11	07811	078113 Mus mus	ຕ
67	15	œ.	35	29	1945	Y419454 Homo sa	Ďį.
m	2151	88.0	1866	11	K050	050922 Mus mus	ä
4	12	7.	35	29	1945	119456 Mus mus	สู
Ŋ	93	٩.	35	5	1945	9455 Pan tro	ᅼ
φ	٠ ش	è.	2	11	4211	042111 Mus mus	ກ່
7	610.	ů.	34	59	1889	418893 Homo sa	'n
ω	160	'n.	7	11	3665	16655 Mus mus	ຕູ
σ	ę.	ů.	34	50	1889	8895	3.
	42	œ.	23	7	1889	8894	gl
	127	ά.	O	13	3459	4592	95
	ω,	9	0	14	B26953	9538	I
	118.	S.	82		6498	498	
	9	щ	CA.		8390	33900	ä
	9	ά.	9		5683	6833	T.
	ġ.	ä	œ		3326	13264	Ţ
	002.	ä	В		1212	2127	Ę
	g	ö	ч		8802	18025	2.2
	ω	ö	œ		5862	8623	Ę
	œ	ö	4		5801	8015	0
	œ	ö	4		1303	3036	Ņ
	œ	ö	œ		6003	0034	
	ø	ö	O.	12	880	18063	Ø
	٠	ę.	-		BG39029	0291	'n
	71.	e.	0		6209	100	
	~	e.	62		4898	8986	0:
	9	ď.	7		5397	3977	E ·
	Q	ď.	0		7855	8556	កា
	4	œ.	7		3904	9043	
30	٠	œ.	m	12	96	ø	0
	94	ω.	м		7950	9500	z
		œ.	7		2803	8036	
	35.	œ	O		5945	9459	: <u>م</u>
	'n	œ.	0		8216	2161	Z,
	m	œ.	O		7788	7887	
	88	è.	a)		6000	0094	
	٠	ŝ	O		0579	5791	=
	23.	4	N		4062	0626	0 1
	4,	4.	0		5260	2600	۲
	٠	4.	67		155853	8530	9
	m	4.	0		55410	108	
	٠	ო	9	12	G390E	0572	4
	2	m.	rO.		5686	6864	4
	2	'n	ហ		U10815	8155	9
	•	'n.	a	σ	79450	504	_

ALIGNMENTS

RESULT.1 AK078113 LOCUS DEFINITION

AK078113
Mus musculus adult male medulla oblongata cDNA, RIKEN full-length enriched library, clone:6330501C04 product:Brg mRNA, mouse homolog of Human ets-related gene BRG, transcript variant 1, full insert sequence. AK078113.1 AK078113.1 GI:26346964 HTC; CAP trapper. Mus musculus (house mouse) Mus musculus Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; ACCESSION VERSION KEYWORDS SOURCE ORGANISM

N

```
(db_xref="FANTOM_DB:6330501C04"

db_xref="MGI:2355112"

db_xref="taxon:10090"

clone="6330501C04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-902-772-2 (1-451) x AK078113 (1-3064)
                                                                                                                                                                                                                                                                                                                                                                                           codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.64e-176
2168.50
87.03%
84.73%
88.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         b (dashes I to 3004),

Evalua, J. Alzawa, K. Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashlzume, W., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashlzume, W., Fukuda, S., Furuno, M., Hirokama, T., Hirozane, T., Hori, F., Imotani, Y., Ishi, Y., Itoh, M., Kagawa, I., Kaukawa, T., Katoh, H., Kawai, J., Katoh, M., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakamura, M., Mistaki, R., Mumraka, M., Makamura, M., Mistaki, R., Nomara, T., Mistaki, R., Ohno, M., Okazami, Y., Saitoh, H., Sakai, K., Ohno, M., Okazami, Y., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sanoh, H., Sasaki, D., Shibata, K., Shibata, K., Shibata, K., Shibata, K., Shibata, K., Shibata, K., Dirakahashi, F., Takaku-Akahira, S., Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muranatsu, M. and Hayashizaki, Y. Diract Submission

Lubmitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute, 1-7-22 Suchiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan, (E-mail:genome-resegge:riken.go.jp, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-922, Fax:81-45-503-922, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Suni, N., Ishi, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yohazaki, Y., Bhikwaw, T., Ozawa, K., Tanaka, T., Matsunura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                    Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases 1 to 3064)
      Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection
Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Please visit our web site for further details.
URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/.
Location/Qualifiers
                                                      Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/mol type="mRNA"
/strain="C57BL/60"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prepare mouse tissues.
                                                                                                                                                                                .0349636
                                                                                                                                                                                                                                                                                                                                                                                                                           1042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
REFERENCE
AUTHORS
                                REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
```

```
ŏ
                                                                                                                                                                                                                 /protein id="BAC37131.1"
/db_xref="G1:26346965"
/db_xref="G1:26346965"
/fb_xref="G1:26346965"
/skaspavpQpwisQpaparyTikrecvvseDQSLFECAYGTPHLAKTEWTASSSSDYGQT
SkaspavpQpwisQsparyTikrecvvseDVMGSRNSPDEGSVNKGGRAVGSPDTVGM
SyGSYMBERHVPPPNMTTNERRVIVPADPTLWSTDHVRQWLEWAVKEYGLLDVDVLLF
                                                                                                                                                                                                                                                                                                                                          ONIDGKEQCKMTKDDFQRLFPSYNAJILLSHLHYLRETPLPHLTSDDVDKALQNSPRL
MHARNTGGAAFI FPNTSVYPEATQRI TTRPAAQPSSSAVPKTEDQRPQLDPYQILGFT
SSRLANDRSGOJ QLMQFLELLSDSSNONICITWEGTNGEFKMTDPDDVARRWGEFKSK
SSRLANDRSGOJ QLMQFLLELLSDSSNONICITWEGTNGEFKMTDPDDSVARRWGEFKSK
PNMAYDKLSRALRYYYDKNI MTKYHGKRYDYKFDFHGIAQALQPHPPESSLYKYPSDL
PYMGSYHAHPQKMNFVSPHPPALPVTSSSFFASPNPYWNSPTGGIYPNTRLFASHMPS
/tissue_type="medulla oblongata"
/clone_lib="RIKEN full-length enriched mouse cDNA library"
cto __isage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                              61. _1431
/note="unnamed protein product; Erg mRNA, mouse homolog
/note="unnamed gene ERG, transcript variant 1
Human ets-related gene ERG, transcript variant 1
(DBJ|AB073078, evidence: BLASIN, 99%, match=1768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 CCAGCCAGGGTCACCATCAAGATGGAGTGCAACCCTAGTCAGGTGAATGGTTCCAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81 SerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerAspAsnVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 reaccidargagigeagrergaacaaagereggaagargereggegegeceggaracrere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101 GlyMetAsnTyrGlySerTyrMetGluGluLysHisIleProProProAsnMetThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 AsnGluArgArgVallieValProAlaAspProThrLeuTrpSerThrAspHisValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161 GlnasnileaspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 CysAlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41 TyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 GlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421 AATGAGCGCAGAGTGATCGTCCTGCAGATCCTACTCTGTGGAGCACAGACCATGTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3064
405
11
13
49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
```

Clark, A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J. Adams,M.D. and Cargill,M. Inferring nonneutral evolution from human-chimp-mouse orth gene trios science 302 (5552), 1960-1963 (2003) AL Science 302 (5552), 1960-1963 (2003) CE 2 (bases 1 to 1350) CB 2 (bases 1 to 1350) CB Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Cheng,X.H., White,T.J., Sninsky,J.J. Adams,M.D. and Cargill,M. Direct Submitsion Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Driv Rockville, MD 20850, USA	COMMENT These sequences were made by sequencing genomic exons and ordering them based on alignment. FEATURES Location/Qualifiers 1.1350 1.1350 /organism="Homo sapiens" /mol_type="genomic DNA" /db_xref="leaxon:9606" /db_xref="taxon:9606" /locus_tag="HCM6896" /locus_tag="HCM6896"	Alignment Scores: 4.61e-176 Length: 1350 Score: 2157.00 Matches: 400 Secrent Similarity: 91.09\$ Conservative: 9 Best Local Similarity: 89.09\$ Mismatches: 36 Query Match: 29.29\$ Gaps: 2	US-09-902-772-2 (1-451) x AY419454 (1-1350) QY 7 GluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCyaAlaTyrGlySerFro 26 T GluAlaLeuSerYalValSerGluAspGlnSerLeuPheGluCyaAlaTyrGlySerFro 26 Db 1 GAAGCCTTATCAGTTGAGTGAGTGAGCACCACGTTGTTTGAGTGTCCTACGGAACGCCA 60 QY 27 HisleuAlaLysThrGluMetThrAlaSerSerSerSerGruGluTyrGlyGlnThrSerLys 46	47 NetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgValThrIle	Db 181 AAAATGGAATGTAACCCTAGCCAGGTGAATGGCTCAAGGAACTCTCCTGATGAATGCAGT 240 Qy 87 ValAlaLyeGlyGlyLyeMetValSerSerSerAspAsnValGlyMetAsnTyrGlySer 106 Db 241 GTGGCCAAAGGCGGGAAGATGGGGGGCGCCCCTTGGGATGAACTACGGCAGC 300 Qy 107 TYMEtGlyGlyLySHiglEproProProAsnMetThrThrAsnGlyArgVall1e 126	Db 301 TACATGGAGAGACACATGCCACCCCAACATCACCACGAACGA
ProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg	234 ThrSerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerThrValPro 253	294 SerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMet 313	334 TyrasplysleuserargalaleuargTyrTyrTyrAsplysanileMetThrLysVal 353 1075 TATGACAAGCTCAGCGCGCCTCCGGTACTACTACGACAAAACATCATGACCAAGGTG 1134 354 HisGlyLysArgTyrAlaTyrLysPheAspPheHisGlylleAlaGlnAlaleuGlnPro 373 1135 CACGGGAAGCGCTACAAGTTTGACTTCCACGGGATTGCCCAGGCCTGCAGCCC 1194 374 HisProProGluserGarMetTyrLysTycTyrProSerAspleuProTyrMetSerSerTyr 393	CACCTCCTGAGTCGTCCTGTACAAGTACCCTCCGACTGCCATACATGGGCTCCTAT 1	414 SerSerSerPheAhaAlaPleAshProAshProTyTTpAshSerProThrolyGlyIleTyr 433 11	AY419454 AY419454 LOCUS BETUNITION Home sapiens ERG gene, VIRTUAL TRANSCRIPT, partial sequence, Genemic survey sequence. AY419454 GENEMIC SURVEY SEQUENCE. AY419454

```
RESULT 3
AK050922
                                                                                        SOURCE
ORGANISM
                                                                                                                                                           ACCESSION
VERSION
                    REFERENCE
                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                              443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                         sequence.
AK050922
AK050922.1
                                                         Mus musculus
Eukaryota, Metazoa,
                                                                                                                                                                                                                             Mus musculus 9 days enriched library, cloof Human ets-related
                                                                                                            Mus musculus (house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgProGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCCTTCTCATCTGGGCACTTACTAC 1347
                                                                                                                                                                                                                                                                                                                                                                                                                                 MetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAlaProHisProProAlaLeuProValThrSerSerSerPhePheAlaAlaProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTTCCACGGGATCGCCCAGGCCCTCCAGCCCCACCCCGGAGTCATCTCTGTACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCTGGGAAGGCACCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGCCCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGCTCCAACTCCAGCTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAATCCAGGCAGTGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGlyGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATATGAGCCCCCAGGAGATCAGCCTGGACCGGTCACGGCCACCCCCAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr --- GlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuProAlaAlaHis 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGGAGAGCGGAAGACCAAACATGAACTACGATAAGCTCAGCCGCGCCCTCCGT
                                                                                                                                       CAP trapper
                                             Eutheria;
                                                                                                                                                           GI:26341597
                                                                                                                                                                                                                          1866 bp mRNA linear HTC 20-SEP-200:
days embryo whole body CDNA, RIKEN full-length
ry, clone:D030036124 product:Erg mRNA, mouse homolog
elated gene ERG, transcript variant 1, full insert
                                             Chordata;
Rodentia;
                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL REFERENCE
                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                  Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Pukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hirancto, K., Hiraoka, T., Hirozane, T., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kasukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Marsuyama, T., Miyazaki, A., Murata, M., Nakamura, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaki, A., Muramatsu, M. and Hayashizaki, Y. Towaru, A., Toya, T., Yasunishi, A., Muramatsu, M. and Hayashizaki, T. Toya, T., Yasunishi, A., Muramatsu, M. and Hayashizaki, Y. Direct Submission

AL Sibmitted (16-7UI-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama, Takingawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222, URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new 9 Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Group Phase I & II Team.
Analysis of the mouse transcriptome of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases 1 to 1866)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Pujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., RIKEN integrated sequence analysis (RISA) system-364-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High-efficiency full-length cDNA cloning Meth. Enzymol. 303, 19-44 (1999) 99279253
                                                                                                                                                                                                                                                                                  CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group Genomic Sociences Center and Genome Science Laboratory in F Division of Experimental Animal Research in Riken contribu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nature 409,
5
                                                                                                                                                                                     URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FANTOM Consortium. Functional annotat
                                                                                                                                                                                                                                  prepare mouse tissues.
Please visit our web site for further details
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The FANTOM Consortium and the RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The RIKEN Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20530913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1076861
/organism="Mus musculus"
/mol type="mRNA"
/strāin="C57BL/6J"
/db_xref="FANTOM_DB:D030036I24"
/db_xref="MGI:24T8825"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            685-690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            on of a (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               based
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Group Phase II Team
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genes
```

Ş B Ś B Ş 밁 5 B Ş 맒 Ś

밁 Ś 밁 Ś B δ B

RESULT

밁 á 밁 Ş Ś 밁 δ

밁

```
Query
DB:
                                                                                                                                                                                            성 옵 성
                                                                                                                                                                                                                                                                                  유상
                                                                                                                                                                                                                                                                                                                                     ф
                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                          S S
                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-902-772-2 (1-451) x AK050922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment
Pred. No.:
       음 성
                                                     뫄
                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sgo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scores:
                                                                                                                       693
                                                                                                                                               142
                                                                                                                                                                             633
                                                                                                                                                                                                        122
                                                                                                                                                                                                                                    573
                                                                                                                                                                                                                                                             102
                                                                                                                                                                                                                                                                                          513
                                                                                                                                                                                                                                                                                                                                               453
                                                                                                                                                                                                                                                                                                                                                                                                       393
                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    273
        813
                                182
                                                             753
                                                                                        162
                                                                                                                                                                                                                                                                                                                                                                                                                               42
                                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaTyrGlySerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyr
                                                                                                                                                                                                                                                                                                                                              GCCAGGGTCACCATCAAGATGGAGTGCAACCCTAGTCAGGTGAATGGTTCCAGGAACTCA
                                                                                                                                                                                                                                                                                                                                                                AlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                      GlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGCTCATATTAAGGAGGCCTTGTCAGTTGTGAGCGAGGACCAGTCACTATTTGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaSerThrIleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCys
                                                                                                                                                                                             GluArgArgVallleValProAlaAspProThrLeuTrpSerThrAspHisValArgGln
                                                                                                                                                                                                                                                   ProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGly
                                                                                                                                                                                                                                                                                                                                                                                                       GGCCAGACATCCAAGATGAGTCCCAGAGTCCCTCAGCAGGACTGGCTGTCTCAAGCCCCA
                       SerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThr
                                                                                      AsnIl
                                                                                                                                                                             GAGCGCAGAG
                                                                                                                                                                                                                                                                                           CCTGATGAGTGCAGTGTGAACAAAGGTGGGAAGATGGTGGGCAGCCCGGATACTGTGGGG
        AATATCGATGGGAAGGTGTGCAAGATGACAAAGGATGACTTCCAGCGGCTCACGCCG
                                                                                                                       TGGCTGGAGTGGGCGGTGAAAGAATATGGCCTCCTCGATGTGGACGTCTTACTATTTCAG
                                                                                                                                      ATGAGCTACGGCAGCTACATGGAGGAGAAGCATGTGCCGCCTCCCAATATGACCACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           putative"

/ codon_start=1

/ protein_id="BAC34461.1"

/ protein_id="BAC34461.1"

/ protein_id="BAC34461.1"

/ protein_id="BAC341598"

/ db xref="G1:26341598"

/ translation="MIQTVPDPAAHIKEALSVVSEDQSLFECAYGTPHLAXTEMTASS

/ translation="MIQTVPDPAHIKEALSVVSEDQSLFECAYGTPHLAXTEMTASS

SSDYGQTSKMSPRVPQQDMLSQAPARVTIKMECNPSQVVRSQNVEXQLL

SPDTVGMSYGSYNESKHYPPPNNVTINERRVIVPADPTLMSTDHYRQWLEWAVKEYGLL

DVDVLLFQNIDGKELCKMTKDDFQRLTPSYNADILLSHLHYLRETPLPHTSDDVDKA

LQNSPRLMIRNNTDLFYSPPRRSAWTGHSHLTPQSKAAQPS9AVPKTDQREQLDPY

QILGPTSSKLANPGSGQIQLMQFLLELLSDSSNSNCTTWEGTNGETKYTDDDBVARW

GERKSKFNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPPESSLY

KYPSDLFYMGSYHAHPQKMNFVSPHPPALPVTSSSFPASPNPYMNSPTGGIYDNTRLP

KYPSDLFYMGSYHAHPQKMNFVSPHPPALPVTSSSFPASPNPYMNSPTGGIYDNTRLP
                                                                             /tissue_type="whole body"
/clone_Tib="RIKEN full-length
/dev_stage="9 days embryo"
249._.1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="unnamed protein product; Erg mRNA, mouse h
Human ets-related gene ERG, transcript variant 1
(DBJ|AB073078, evidence: BLASTN, 99%, match=1768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.51e-175
2151.00
91.07%
87.58%
88.01%
                                                                                                                                                                              cccrecagarccracrcreregaecacagaccarercceacae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-1866)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1866
402
16
27
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA library"
                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                       452
                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332
                                                                                                                                                   161
                                                                                                                                                                                                                                     632
                                                                                                                                                                                                                                                                                             572
                                                                                                                                                                                                                                                                                                                                                 512
             872
                                      201
                                                                 812
                                                                                                                          752
                                                                                                                                                                                692
                                                                                                                                                                                                                                                 RESULT 4
AY419456
LOCUS
                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멅
                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DP DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                          뭥
                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                            REFERENCE
JOURNAL
PUBMED
                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                       1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1038
                                                                                                                                                                                                                                                                                                                                                                1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1218
                                                                                                                                                                                                                                                                                                            1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  918
                                                                                                                                                                                                                                                                                                                                     433
gene trios
Science 307
14671302
                                   Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Musinae; I to 1350)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
                                                                                                                                                                                genomic survey sequence. AY419456 AY419456.1 GI:39775413 GSS.
                                                                                                                                                                                                                                    AY419456 1350 bp DNA
Mus musculus ERG gene, VIRTUAL TRANSCRIPT,
                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrProAsnThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle 432
                                                                                                                                                                                                                                                                                                                                                                                                                      TATCACGCCCACCCCCAGAAGATGAACTTTGTGTCTCCCCACCCTCCCGGTCTCCCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCACGGGAAGCGCTACGACTACAAGTTTGACTTCCACGGGATTGCCCAGGCCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACTATGACAAGCTCAGCCGCGCCCTCCGCTACTACGACAAAAAACATCATGACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGTCAGACAGCTCCAACTGCATCACCTGGGAAGGCACCAACGGGGAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCEGCCACACCACCTCACCCCTCAGTCCAAAGCTGCTCAGCCATCTCCCCTCTGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrSerHisSerHisProThr---GlnSerLysAlaThrGlnProSerSerSerThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGTTAATGCATGCCAGAAACACAGATTTACCTTATGAGCCTCCCAGGAGATCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTG-----ACTTCC-----GATGACGTTGATAAGGCTTTACAAAACTCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgPro
                                                                                                                                                                  musculus (house mouse)
             302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ecreaerceretacaaeracecereceaecrecearacareeecrec
              (5652),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1960-1963
                                                                                                                                                                                                                                        linear
partial
```

sequence GSS 17-DEC-2003

1634

1517 412

1577

1397

372 1337 352

1457 392 332

1217

1277

312

1157

292

1097

272

1037

```
8
                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                     B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                        ₽,
                                                         Ş
                                                                                  В
                                                                                                  Ş
                                                                                                                        밁
                                                                                                                                               Ś
                                                                                                                                                                      밁
                                                                                                                                                                                      Ş
                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-902-772-2 (1-451) x AY419456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
                                                                                    481
                                                                                                                                                                        361
                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scores:
 601
                   204
                                        541
                                                             187
                                                                                                        167
                                                                                                                              421
                                                                                                                                                  147
                                                                                                                                                                                             127
                                                                                                                                                                                                                                        107
                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                  87
                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                       47
                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.

Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
These sequences were made by sequencing genomic exons and orde them based on alignment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGCCTTGTCAGTTGTGAGCGAGGACCAGTCACTATTTGAGTGTGCCTACGGAACGCCA
                                                                                                GluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSerTyrAsnAlaAsp
                                                                                                                            GTGAAAGAATATGGCCTCCTCGATGTGGACGTCTTACTATTTCAGAATATCGATGGGAAG
                                                                                                                                              ValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGlnAsnIleAspGlyLys
                                                                                                                                                                                      ValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGluTrpAla
                                                                                                                                                                                                                                                              GTGAACAAAGGTGGGAAGATGGTGGGCAGCCCGGATACTGTGGGGATGAGCTACGGCAGC
                                                                                                                                                                                                                                                                            ValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGlyMetAsnTyrGlySer
                                                                                                                                                                                                                                                                                                        ### PAGATGGAGTGCAACCCTAGTCAGGTGAATGGTTCCAGGAACTCACCTGATGAGTGCAGT
                                                                                                                                                                                                                                                                                                                     LysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAspCysSer
                                                                                                                                                                                                                                                                                                                                                              MetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgValThrIle
                                                                                                                                                                                                                                                                                                                                                                                             CACCTGGCTAAGACAGAGATGACCGCATCCTCTTCCAGTGACTATGGCCAGACATCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                         HisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyrGlyGlnThrSerLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCysAlaTyrGlySerPro
                                                       IleLeuLeuSerHisLeuHisTyrLeuArgGlu-----ArgGlyAlaThrFheIle
||||||||||||||||||||||||||||||||||
                                                                                    GAGCTGTGCAAGATGACAAAGGATGACTTCCAGCGGCTCACGCCGAGCTACAATGCCGAC
                                                                                                                                                                          GTCCCTGCAGATCCTACTCTGTGGAGCACAGACCATGTCCGACAGTGGCTGGAGTGGGCG
                                                                                                                                                                                                                   TACATGGAGGAGAAGCATGTGCCGCCTCCCAATATGACCACAAATGAGCGCAGAGTGATC
                                                                                                                                                                                                                              TyrMetGluGluLysHisIleProProProAsnMetThrThrAsnGluArgArgVallle
PheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 1350)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <1. .>1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="ERG"
/locus<u>*</u>tag="HCM6896"
                                          2.23e-173
2126.00
90.42%
87.97%
86.99%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-1350)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1350
395
11
39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and ordering
                                                                                                                                                                                                                                       126
                                                                                                                                                                                                                                                                                   106
                                                                                                                                                    166
                                                                                                                                                                                              146
                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                              86
                                                                                                                                                                                                                                                                                                                                                                       ტ
ტ
                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                 46
  660
                                                                                                                               480
                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                          600
                                                               203
                                                                                     540
                                                                                                                                                                          420
                                                                                                                                                                                                                  RESULT 5
AY419455
LOCUS
DEFINITION
            REFERENCE
AUTHORS
                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                            유
8
                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                 JOURNAL
PUBMED
                                                                                                                                                    ORGANISM
                                                                 TITLE
                                                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                             383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 343
                                                                                                                                                                                                                                                                                                                                                                                  403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                       AY419455
Pan troglodytes ERG g
genomic survey sequer
AY419455
AY419455.1 GI:397754
GSS.
 2 (bases 1 to 1350)
Clark, A.G., Glanowski, S., Nielson, R., Tho
Todd, M.A., Tanenbaum, D.M., Civello, D.R.,
                                                     gene trios
                                             Science 302
                                 14671302
                                                                                                                                                                                                                                                                         MetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                     GI:39775412
                                           (5652),
                                                                                                                                                                                                       s ERG gene,
                                             1960-1963
                                                                                                                                                                                                                    1350 bp
e, VIRTUAL
                                                                                                                                                                                                                                                                                               451
                                                                                                                                                                                                                                                                          1347
                                             (2003)
```

```
Pan troglodytes (chimpanzee)
Pan troglodytes
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; E
Mammalla; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 1350)
1 (lask, A.G., Glanowski, S., Nielson, R., Thomas, P., Keja
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murph
Todd, M.A., Tanenbaum, C., Zheng, X.H., White, T.J., Sninsk,
Adams, M.D. and Cargill, M.
                                                                                                                                           Inferring nonneutral evolution from human-chimp-mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTATGAGCCTCCCAGGAGATCAGCCTGGACCGGCCACAGCCACCCCCACAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuProAlaAlaHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGTCTCCCCACCCTCCCGCTCTCCCAGTCACATCTTCCAGTTTCTTTGCTTCCCCGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAlaProHisProProAlaLeuProValThrSerSerSerPhePheAlaAlaProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACCCCTCCGACCTGCCATACATGGGCTCCTATCACGCCCACCCCCAGAAGATGAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTTCCACGGGATTGCCCAGGCCCTGCAGCCCCACCCTCCTGAGTCGTCCCTGTACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerAsnSerAsnCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspProTyrG1nI1eLeuG1yProThrSerSerArgLeuA1aAsnProG1ySerG1yG1n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlńArgProGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr---GlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGGGGAGAAGAGCAAGCCCAACATGAACTATGACAAGCTCAGCCGCGCCCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCTGGGAAGGCACCAACGGGAGTTCAAGATGACAGACCCGGACGAGGTGGCTCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCAGCTGTGGCAGTTCCTGCTCGAACTCCTGTCAGACAGCTCCAACTGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATCCTTACCAGATCCTGGGACCGACCAGTAGCCGCCTTGCTAATCCAGGTAGTGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANAGOTGOTCAGOCATOTCCCCTOTGCAGTGCCCANANCTGAAGACCAGCGTCCTCAGTTA
                                                                                                                                                                                     ,R., Thomas,P., Kejariwal,A., o,D.R., Lu,F., Murphy,B., white,T.J., Sninsky,J.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA linear GSS 17-DEC-2003 TRANSCRIPT, partial sequence,
Thomas,P., Kejariwal
R., Lu,F., Murphy,B.,
                       Kejariwal, A.,
                                                                                                                                                                                                                                                                                               Euteleostomi;
; Pan.
                                                                                                                                              orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
```

```
g 8
                                                                                                                                                                                                                                                                                                          B
                                                                                  중 음 중
                                                                                                                                                  В
                                                                                                                                                                  δ
                                                                                                                                                                                    D<sub>P</sub>
                                                                                                                                                                                                       중 음 성
                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local S
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-902-772-2 (1-451)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
          Š
                             밁
                                           5
                                                               뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Perriera, S., Wang, G., Zheng, X.H., W. Adams, M.D. and Cargill, M. Direct Submission
Submitted (16-NOV-2003) Celera Geno: Rockville, MD 20850, USA
These sequences were made by sequence based on alignment.
                                                                                                             481
                                                                                                                                 167
                                                                                                                                                     421
                                                                                                                                                                        147
                                                                                                                                                                                             361
                                                                                                                                                                                                                127
                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                      107
                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scores:
          224
                              601
                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                           47
                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                    27
                                                                                                                                                                                                                                                                                                                                                                                                                                       ь.
                                                                                                                                                                                                                                                                                                                                                                                                                                      GluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCysAlaTyrGlySerPro
                                                                                                                                                                                                                                                                                                                  LysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAspCysSer
                                                                                                                                                                                                                                                                                                                                                                   MetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArgValThrIle
                                                                                                                                                                                                                                                                                                                                                                                                          HisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyrGlyGlnThrSerLys
                                                                                                                                                                 ValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGlnAsnIleAspGlyLys
                                                                                                                                                                                            TyrMetGluGluLysHisIleProProProAsnMetThrThrAsnGluArgArgVallle
                                                                                                                                                                                                                                                                           ĠŦĠĠĊĊĄĄĄĠĠĊĠĠĠĄĄĠĄŦĠĠŦĠĠĠĊĄĠĊĊĊĄĠĄĊĄĊĊĠŦŦĠĠĄŦĠĄĄĊŦĄĊĠĠĊĄĠĊ
                                                                                                                                                                                                                                                                                       ValAlaLysG1yG1yLysMetValSerSerSerAspAsnValG1yMetAsnTyrG1ySer
                                                                                                                                                                                                                                                                                                                                                        CACCTGGCTAAGACAGAAATGACCGCGTCCTCCAGCGACTATGGACAGACTTCCAAG
ProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisSerHisProThr---
                               PheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeu
                                                                                  NAACTGTGCAAGATGACCAAGGACGACTTCCAGAGGCTCACCCCCAGCTACAACGCCGAC
                                                                                                                          GluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSerTyrAsnAlaAsp
                                                                                                                                                      GTGAAAGAATATGGCCTTCCAGNNNTCAACATCNNNTTATTCCAGAACATCGATGGGAAN
                                                                                                                                                                                                               ValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGluTrpAla 146
                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="Laxon:9598"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'gene="ERG"
'locus_tag="HCM6896"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7.86e-157
1935.00
83.74%
81.74%
79.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              x AY419455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (1-1350)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequencing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genomics,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       White, T.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1350
367
9
69
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         West
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sninsky, J.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gude
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and ordering
            242
                                 660
                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                        126
                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                             66
                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                        600
                                                                                                                                  186
                                                                                                                                                      480
                                                                                                                                                                         166
                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                     86
                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
```

```
RESULT 6
AK042111
LOCUS
DEFINITION
                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유 상 유 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
 JOURNAL
MEDLINE
PUBMED
                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                       AK042111
AK042111.1
HTC; CAP tra
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,X., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y., Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                     Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                  AK042111 1706 bp mRNA Mus musculus 3 days neonate thymus cDNA, library, clone:A630059III product:Friend
                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                             gnw
                                                                                                                                                                                                                                                                                                                     full insert sequence.
                                                                                                                      0349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TrpGlyGluArgLysSerLysBroAsnMetAsnTyrAspLysLeuSerArgAlaLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGlyGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysAlaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgProGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATATGAGCCCCCAGGAGATCAGCCTGGACCGGTCACGGCCACCCCACGCCCAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATACTGGAATTCACCAACTGGGGGTATATACCCCAATACTAGGCTCCCCACCAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGCGCCCCACCCTCCAGCCCTCCCCGTGACATCTTCCAGTTTTTTTGCTGCCCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValAlaProHisProProAlaLeuProValThrSerSerSerPhePheAlaAlaProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACCCCTCAGACCTCCCGTACATGGGCTCCTATCACGCCCACCACAGAAGATGAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTTCCACGGGATCGCCAGGCCCTCCAGCCCCACCCCGGAGTCATCTCTGTACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTGGGAAGGCAACGGGGAGTTCAAGATGACGGATCCCGACGAGGTGGCCCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATCCTTATCAGATTCTTGGACCAACAAGTAGCCGCCTTGCAAATCCAGGCAGTGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAAGACCAGCGTCCTCAGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCCTTCTCATCTGGGCACTTACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProTyrTrpAsnSerProThrGlyGlyIleTyrProAsnThrArgLeuProAlaAlaHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTACTATGACAAGAACATCATGACCAAGGTCCATGGGAAGCGCTACGCCTACAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCAGCTTTGGCAGTTCCTCCTGGAGCTCCTGTCGGACAGCTCCAACTCCAGCTGCATC
                                                                                                                                                                                                                                             musculus
                                                                                                                                                                                                                                                          musculus (house mouse)
                                                                                                                                                                                                                                                                                          GI:26334936
                                                                                                                                                                                                                                                                                                                                                                                                                              1347
                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                           451
                                                                                                                                                                                                                                                                                                                                       linear HTC 19-SEP-2003 RIKEN full-length enriched leukemia integration 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282
```

```
/cocon start=1
/proteIn_id="BAC31169.1"
/proteIn_id="BAC31169.1"
/proteIn_id="BAC31169.1"
/db.xref="Grad + 26334937"
/translation="MOGTTREALSTVSDDQSLFDSAYGAAHLPKADMTASGSPDYGQ
/translation="MOGTTREALSTVSDPTMYGBHYRQWLENGTREYGLMEDPMY
PHXINPLPPQQGWINQPVRVNVKREYDHMYGBHYRQWLENGTREYGLMEDTBFFQ
NNSYMBEXGRPPPPRMYTNBRRYIVPADPTLWYGHYRQWLENGTREYGLMYRGTREYGLMYRG
NNGGKELCKMNKEDFLATSAYNTEVLLSHLSYLRESSLLAYTTSHTDQSSRLNVKE
DPSYDSYRRGANNNNNNSGLINKSPLLGGSQTMGKNTEQRPQDPYQLLGFTSSRLANP
GSGQIQLWQFLLELLSDSANASCTTWRGTRGEFKWTDPDEVARRWGERKSKPNNNYDK
LSRALRYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPTETSMYKYPSDISYMPSYH
AHQQKVNRPVPSHPSSMPVTSSSFFRGAASQYMTSPTAGIYPNBSVPRHPNTHVPSHLGS
YY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389 GAGTOTOCOGTGGACTGCAGTGTCAGCAAATGTAACAAGCTGGTGGGCGGAGGCGAAGCC 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThribrasnGluargargValileValProAlaaspProThrieuTrpSerThrAspHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValArgGinTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179 LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyAlaThrPhellePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---AGTTCACTGCTGTATAACACAACCTCCCATACAGACCAGTGCTCACGACTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrangProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetalaSerThrileLysGlualaLeuSerValValSerGluAspGlnSerLeuPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeupheglnasnileAspGlyLysGluLeuCysLysMetThrLysAspAspPheglnarg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProProAlaArgValThrIleLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 ValGlyMetAsnTyrGlySerTyrMetGluGluLy8His---IleProProAsnMet
                                                                                                                                                                                                                                                                                                                                1706
305
36
56
85
11
                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-1706)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-902-772-2 (1-451) x AK042111
                                                                                                                                                                                                                                                                                                                                8.02e-129
1613.50
78.99%
66.74%
66.02%
                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                119
                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Si
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    පි පි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                           The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Lature 420, 563-573 (2002)

E (Dasses I to 1706)

E (Dasses I to 1706)

E (Adachi, J., Arizawa, K., Akimura, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Harozane, T., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Katoh, H., Kawai, J., Shili, Y., Kohno, H., Kowia, M., Kojima, Y., Kohno, H., Kowia, M., Ohsato, N., Nakai, K., Nomura, Y., Nunda, A., Nurata, M., Ohsato, N., Okazaki, Y., Salto, H., Salto, H., Sakai, C., Sakai, K., Sakazume, N., Sasaki, Y., Salto, R., Salto, H., Sakai, C., Sakai, K., Sakazume, N., Sogabe, Y., Tangami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, Eakeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muramatsu, M. and Hayashizaki, Y., Toya, T., Yasunishi, A., Direct, Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          raxion library was prepared and sequenced in Mouse Genome conf. library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

Tissues were provided by Dr. John Todd (Dept. of Medical Genetics Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome Trust MRC building Addenbrookes Hospital Cambridge) whose assistance we gratefully acknowledge. Please visit our web site for further details.

URL:http://genome.gsc.riken.go.jp/.

URL:http://genome.gsc.riken.go.jp/.

URL:http://fancom.gsc.riken.go.jp/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="thymus"
/clone lib="RIKEN full-length enriched mouse cDNA library"
               Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Stonico, H., Akiyama, J., Nishi, K., Kitaunai, T., Trashiro, H., Itoh, M., Sumi, N., Ishi, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Yaliwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watsahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. Sequencing pipeline with 384 multicapillary sequencer
                                                                                                                                                                                                                                                                                            RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="unnamed protein product; Friend leukemia
integration 1 (MGD|MGI:95554, GB|NM_008026, evidence:
BLASTN, 99%, match=1671)
                                                                                                                                                                                                                                                                                                                  FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection
Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="FANTOM_DB:A630059111"
/db_xref="MG1:4407136"
/db_xref="taxon:10090"
/clone="A63059111"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dev stage="3 days neonate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                   20530913
                                                                                                                                                                                                          JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                       PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
```

us-09-902-772-2.p2n.rst

음

Š

ò 용 ò

ò 셤 à 셤 d

à g 8 g ò d δ d g

à

```
163 IleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSer 182
                                                                                                                                                                                                                                                                                                                                                                                                                                           61 GCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCTGACTACGGGCAG 120
ordering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44 ThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArg 63
                                                                                                                                                                                                                                                                                                                                                                         TyrGlySerTyrMetGluGluLysHis---IleProProProAsnMetThrThrAsnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292 TACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCCCAACAAGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ArgargvalllevalProalaAspProThrLeuTrpSerThrAspHisValArgGlnTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeuLeuPheGlnAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         472 Arggardecaadgaacrefefaaaafgaacaadgagaacriccrececececece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TyrasnalaaspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThrGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTICTTATGACTCAGAGAGAGGCTTGGGGCAATAACATGAATTCTGGCCTCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAlaThrGln---ProSerSerThrValProLysThrGluAspGlnArgProGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 ValThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84 AspCysServalAlaLysGlyGlyLysMetValSerSerAspAsnValGlyMetAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 532 TACAACACGGAAGTGCTGTTGTCACACCTCAGTTACCTCAGGGAA-----AGTTCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203 IlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                      25 ---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerSerGluTyrGlyGln
                                                                                                                                                                                                                                                                                                                                                           5 IleLysGluAlaLeuSerValValSerGluAspGlnSerLeuPheGluCysAlaTyrGly
exons and
 sequencing genomic
                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                              1. .1347
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                            (1-1347)
                                                                                                         <1. - . > 1347
/gene="FLI1"
/locus_tag="HCM6709"
These sequences were made by them based on alignment.
               d on alignment.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                              US-09-902-772-2 (1-451) x AY418893
                                                                                                                                                                                                             1.01e-128
1610.50
79.69%
66.67%
65.90%
                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                 Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                               Alignment
                                                                                                                   gene
                                  FEATURES
   COMMENT
                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                          쉱
                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            업
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1347 bp DNA linear GSS 17-DEC-2003 VIRTUAL TRANSCRIPT, partial sequence,
                                                                                                                                                                1042
                                                                                                                                                                                                                               1102
                                                                                                                                                                                                                                                                                             1162
                                                                                                                                                                                                                                                                                                                                                                                                                         1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               357
                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          417
                                                                                                                                                                                               317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          435
                                                                 277
                                                                                                982
                                                                                                                                 297
                                                                                                                                                                                                                                                              318 GluvalAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro 397
   257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota, Metazoa; Chordata; Catarrhini; Hominidae; Homo.
I (bases I to 1347)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Perriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGGCCTCAACAAAGTCCTCTCCTTGGAGGATCACAGACCATGGGCAAGAACACTGAG
                                                                                        ProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                                                  1043 AACGCCAGCTGTATCACCTGGGGGGGCACCAACGGGGGAGTTCAAAATGACGGACCTGAT
                                                                                                                                                                                                                                                                                        1103 GAGGTGGCCAGGCGCTGGGGGAGAGCGGAAGAGCCCAACATGAATTATGACAAGCTG
                                                                                                                                                                                                                                                                                                                              SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                              1163 AGCCGGGCCCTCCGATACTACTATGACAAAAACATTATGACCAAAGTGCATGGCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                            TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrGlnSerLysAla - - - ThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                                                                                                                983 CCTGGGAGTGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAACTACTGTCCGACAGCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PhealaalaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn----
                                                               GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsn
                                                                                                                                                                                              298 AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A. Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A. Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Adams, M.D. and Cargill, M. Adams, M.D. and Cargill, M. Direct Submitssion

Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens FLII gene,
genomic survey sequence.
AY418893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AY418893.1 GI:39774853
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AY418893
   239
                                  863
                                                                                                                                 278
                                                                                                                                                                                                                                                                                                                               338
                                                                                                                                                                                                                                                                                                                                                                                               358
                                                                                                                                                                                                                                                                                                                                                                                                                                                              378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             418
                                                                 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
AY418893
```

103

231

83

291

177

24

43

122 351 142 411 162 471 202

585 222 645 242 705

TITLE

765

```
The required consortium and the Kirkin Genome Exploration Research
Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-langth cDNAs

Adachi, 1, Aizawa K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
Edachi, 1., Aizawa K., Hangaki, T., Hara, A., Hashizume, M.,
Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, M.,
Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T.,
Hayashida, K., Mayatsu, N., Hiramoto, S., Konno, H., Kasukawa, T.,
Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M.,
Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, R., Ohno, M., Ohasto, N.,
Okazaki, Y., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N.,
Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T.,
Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T.,
Sogabe, Y., Tagami, M., Tagawa, A., Toya, T., Yasunishi, A.,
Mirameteu, M. and Hayashizaki, Y.
Direct Submission
Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of
Exploration Research Group, RIKEN Genome Siporation Research Group, Fire Hayashizaki, Y.
WEL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
FRISHITCH STANDARD GENOME GENOME GENOME AND SEARCH STANDARD GENOME
FRISHITED STANDARD GENOME GENOME GENOME AND SEARCH STANDARD GENOME GENOME GENOME GENOME SEARCH STANDARD GENOME GENOME GENOME SEARCH STANDARD GENOME GENOME SEARCH STANDARD GENOME GENOME GENOME GENOME SEARCH STANDARD GENOME SEARCH STANDARD GENOME SEARCH STANDARD GENOME SEARCH STANDARD G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /LTTRILALION="WDGTIKEALSVVSDDQSLFDSAYGAAAHLPKADMTASGSFDYGQ
FUKINPLPGOGWINGPYRYNVKREYDHMGGSRESPVDGSYKCNKU/GGGGARNNYN
SYMDENGGPPPPMTINGPRYLYPDDPTLWTQBHYRQMLEWAIKEYGLMEIDTSFFQN
MDGKELCKOMKEDPIRATSAYNTEVILSHLSYLRESSLLAYNTSHTDQSSRLNVKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ltissue type="bone"
/clone lib="RIKEN full-length enriched mouse cDNA library"
dev_stage="adult"
Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J. Okazaki, Y., Muramatsu, M., Inoue, Y., Kirah, and Hayashizaki, Y. RIKBN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             conf. library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Rib Encyclopedia Project of Genome Exploration Research Group in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. Please visit our web site for further details. UKL:http://genome.gsc.riken.go.jp/.UKL:http://fantom.gsc.riken.go.jp/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="unnamed protein product; Friend leukemia
integration 1 (MGD|MGI:95554, GB|NM_008026, evidence:
BLASIN, 99%, match=1671)
                                                                                                                                                                                                                                                                                                                                         The RIKEN Genome Exploration Research Group Phase II Team and
                                                                                                                                                                                                                                                                                                                                                                                FANTOM Consortium.
Functional amotation of a full-length mouse cDNA collection
Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
mol type="mkN"
strain="C57Bi/6J"
/db_xref="RANTOM DB:9830146N17"
/db_xref="MG1:2401092"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /protein_id="BAC29518.1"
/db_xref="GI:26331576"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sex="male"
                                                                                                                                                                                                                                                                          11076861
                                                                                                                                                                                                                                   MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AK036655

Mus musculus adult male bone cDNA, RIKEN full-length enriched library, clone:9830146N17 product:Friend leukemia integration 1, full insert sequence.

AK036655.

HTC; CAP trapper.

Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCTGGGGGGAAAAAGCAAGCCAACATGAATTACGACAAGCTGAGCCGGGCCCTC 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTATTACTATGATAAAACATTATGACCAAAGTCCACGGCAAAAGATATGCTTACAAA 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THILL THILL TO THE TEACHER TO THE THILL THE THE TABLE TO THE THE TABLE TO THE TABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1246 TCACAATACTGGACCTCCCCCACGGGGGGAATCTACCCCAACCCCAACGTCCCCGGCCAT 1305
                                                                                                                                                                                                                                                                          882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PhevalalabroHisproProAlaLeuProValThrSerSerSerPhePheAlaAlaPro 421
                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                           945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeuSerArgAlaLeu 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProFroGluSerSerMetTyr 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGlnLysMetAsn 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-----ThrArgLeu 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                   Gln1leGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnCys
                                                                                                                                                                                                                                           CAGATCCAGCTGTGGGCAATTCCTCCTGGAGCTGCTCCTCCGACAGGCGCCAACGCCAGCTGT
                                                                                                                                                                                                                                                                                                                                                    11eThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArg
                                                                                                                                                                                                                                                                                                                                                                                           ArgTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLys
                                                          LeuAspProTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGly
                                                                                                                             CCTAACACCCACGTGCCTTCACACTTAGGCAGCTACTAC 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       439 ProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
9279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              422
                                                                                                                                 766
                                                                                                                                                                                                                                                                              826
                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                               886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AK036655
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 & 8 & 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                             $ B $
```

```
14671302
                                                                                                                                                                                                                                                                                                                                            AY418895
                                                                                                                                                                1254
                                                                                                                                                                                                                                                                       1434
                                                                                                                                                                                                                                                                                                         1494
                       1014
                                                         1074
                                                                                                                                               358
                                                                                                                                                                                 378
                                                                                                                                                                                                                   398
                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                         436
                                         298
                                                                          318
                                                                                                            338
                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                           RESULT 9
AY418895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                               g
                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                     원
                   q
                                    $ 8 $
                                                                                        셤
                                                                                                       ò
                                                                                                                       g
                                                                                                                                              δ
                                                                                                                                                            B
                                                                                                                                                                               ઠે
                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                        ò
PSYDSVRRGAMNNMNSGLNKSPLLGGSQTMGKNTEQRPQPDPYQILGPTSSRLANPG
SGQIQLWQFLLELLSDSANASCITWEGTNGBPRATDPDBVARRWGBRKSKRNMNYDKL
SRALRYYYDKNIMTKYHGKRYAYKRDPHGIAQALQPRPTETSNYKYBDISYMPSYHA
HQQKVNPVPSHPSSMPVTSSSFFGAASQYWTSPTAGIYDNPSVPRHPNTHVPSHLGSY
Y"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     479
                                                                                                                                                                                                                                                                                                                                    118
                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                      138
                                                                                                                                                                                                                                                                                                                                                                                       599
                                                                                                                                                                                                                                                                                                                                                                                                        158
                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    257
                                                                                                                                                                                                           311
                                                                                                                                                                                                                                             371
                                                                                                                                                                                                                                                                                422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGluArg 198
                                                                                                                                                                                                                                                                                              80 AsnSerProAspAspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsn 99
                                                                                                                                                                         251
                                                                                                                                                                                                                                                              79
                                                                                                                                                                                          39
                                                                                                                                                                                                                             23
                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCCCCTGAAATAATAACTACATGGATGAGAAAGAACGGCCCCCCTCCTCCCCAACATG
                                                                                                                                                                                                                                                                                                                                                                     ThrThrAsnGluArgArgValIleValProAlaAspProThrLeuTrpSerThrAspHis
                                                                                                                                                                                                                                                                                                                                                                               LeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCTTCCAGAACATGGATGGCAAGGAATTGTGTAAAATGAACAAGGAGGACTTCCTCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGGCCTCAAAAAGTCCTCCTCGAGGATCACAGACCATGGGCAAGAACACTGAG
                                                                                                                                                       Met Ala SerThrile Lys Glu Ala Leu Ser Val Val Ser Glu Asp Gln Ser Leu Phe Glu
                                                                                                                                                                 CysAlaTyrGly---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSer
                                                                                                                                                                                                      252 TCAGCATACGGAGCGCAGCCCATCTCCCCAAGGCAGATATGACTGCTTCGGGGAGTCCT
                                                                                                                                                                                                                            GluTyrGlyGlnThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGln
                                                                                                                                                                                                                                       ProProAlaArgValThr1leLysMetGluCysAsnProAsnGlnValAsnGlySerArg
                                                                                                                                                                                                                                                                                                                                   100 ValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---IleProProProAsnMet
                                                                                                                                                                                                                                                                                                                                                                                                        ValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAspIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                  GTTCGACAGTGGCTGGAGTGGGCTATAAAGGAATACGGATTGATGGAGATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyAlaThrPhellePheProAsnThrSerValTyrFroGluAlaThrGlnArgIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrargProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProThrGlnSerlysAla -- - ThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                          3118
305
55
85
12
                                                                          Length:
Matches:
Conservative:
Mismatches:
                                                                                                            Indels:
Gaps:
                                                                                                                                      (1-3118)
                                                                                                                                       x AK036655
                                                                         2.01e-127
1602.00
78.77%
66.74%
65.55%
                                                                                                                                      (1-451)
                                                                                                      Similarity:
                                                                                           Percent Similarity:
                                                                 Alignment Scores:
Pred. No.:
                                                                                                                                      US-09-902-772-2
                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                                                                                                                                                                                           099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      954
                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                          159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                             312
                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                372
                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     894
                                                                                                            Query Match:
DB:
                                                                                                     Best Local
                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 8
                                                                                                                                                                                                                                                          ठ व ठ
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                g &
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                       à
                                                                                                                                                                   음 장
                                                                                                                                                                                                       원 상 원
```

```
1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA linear GSS 17-DEC-2003
TRANSCRIPT, partial sequence,
                                                                                                                                                                                                                                                                                                                                       1253
                                                                                                                                                                                                                                                                                                                                                                                                                                        1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1493
                                            1073
                                                                                                                                          1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        417
                                                                                                                                                                                          337
                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                         377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ordering
297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY18895.1 GI:39774855
GSS.
Mus musculus (house mouse)
Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Musinae; Lo 1347)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Ferriera, S., Nanghy, B., Ferriera, S., Nanghy, B., Ferriera, S., Nanghy, B., Adams, M.D. and Cargill, M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                         CCTGGGAGTGGGCAGATCCAGCTGTGGCAGTTTCTCCTGGAACTACTGTCCGACAGCGCC
                                                                                                                                                                                            GluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                              134 GAGGTGGCCAGGCGCTGGGGAGAGCGGAAGAGCCAACAACATGAATTATGACAAGCTG
                                                                                                                                                                                                                                                                                                                                          1194 AGCCGGGCCCTCCGATACTATGACAAAAACATTATGACCAAAGTGCATGGCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                            TyralaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGlu
                                                                                                                                                                                                                                                                                                                                                                                                                        TATGCCTACAGTTTGACTTCCATGGCATTGCCCAGGCCCTGCAGCCACATTCCAACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGGAGCATCACAATACTGGACCTCCCCCACTGCTGGGATCTATCCAAACCCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Murphy, B., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Direct Submission
                                                                                                                                                                                                                                                                                        SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
  ProGlySerGlyGlnIegInLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GICCCCGCCATCCTAACACCCACGTGCCTTCACACTTAGGCAGCTACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                West Gude
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (16-NOV-2003) Celera Genomics, 45 Rockville, MD 20850, USA These sequences were made by sequencing geno them based on alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene trios
Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .1347
/organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
<1. .>1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1347 bp
VIRTUAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus FLI1 gene,
genomic survey sequence.
AY418895
```

361

1125

401

421

381

```
AY418894
Pan troglodytes FLII gene, VIRTUAL TRANSCRIPT, partial sequence, Genomic survey sequence.
AY418894
AY418894
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Tolark, A.G., Glanowski, S., Nielson, R., Tu, F., Murphy, B., Todalow, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Terriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Diect Submission Direct Submission Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA These sequences were made by sequencing genomic exons and ordering them based on alignment.

Location/Qualifiers
                                                                           1186 TTTGTCCCGTCTCCATCCTCCATGCCTGTCACCTCCTCCAGCTTCTTTGAAGCACA
                                                           ArgTrpGlyGluArgLyBSerLyBProAsmMetAsnTyrAspLygLeuSerArgAlaLeu
                                                                                                             ArgTyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLys
                                                                                                                             PheasppheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyr
                                                                                                                                                                                LysTyrProSerAspLeuProTyrMetSerTyrHisAlaHisProGlnLysMetAsn
                                                                                                                                                                                                                                                                        PheValAlaProHisProProAlaLeuProValThrSerSerFhePheAlaAlaPro
                                                                                                                                                                                                                                                                                                                              422 AsnProTyrTrpAsnSerProThrGlyGlyIleTyrProAsn-----ThrArgLeu
                      IleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAspGluValAlaArg
                                                                                                                                                                                                                                                                                                                                                                                                 ProAlaAlaHisMetProSerHisLeuGlyThrTyrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Pan troglodytes"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic_Dr
/db_xref="taxon:9598'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="FLI1"
/locus_tag="HCM6709"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14671302
                                                                                                                                                                      362
                                                              322
                                                                                                                 342
                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                              402
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AY418894
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                         용
                                셤
                                                                                 8 A
                                                                                                                                    8 6 8
                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                            8 & 8
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleaspGlyLysGluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSer 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            646 CCTTCTTATGACTCTCTCTGAGGAGGAGGAGGAAGAACAATAATATGAACTCTGGCCTCAACA 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysAla---ThrGlnProSerSerSerThrValProLysThrGluAspGlnArgProGln 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262 LeulapproTyrGlnIleLeuGlyProThrSerSerArgLeuAlaAsnProGlySerGly 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgargvalllevalProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrp 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGlurrphlaValLysGluryrGlyLeuProAspValAspIleLeuLeuPheGlnAsn 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrasnalaaspileLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThrPhe 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              223 LeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThrGlnSer 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnileGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnSerAsnCys 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrGlySerTyrMetGluGluLysHis---IleProProProAsnMetThrThrAsnGlu 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspCysSerValAlaLysGlyGlyLysMetValSerSerSerAspAsnValGlyMetAsn 103
                                                                                                                                                                                                                                                                                                                                                                                                                             291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352 cegagagicalierecerecagaceceaedererereaegacacagaederereaegae
                                                                                                                                                                                                                                                       231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351
                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                83
                                                                                                                                                                                                                                       ---SerProHisLeuAlaLysThrGluMetThrAlaSerSerSerGluTyrGlyGln 43
                                                                                                                                                                                                                                                                                                                                                                    ValThrileLysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203 IlePheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAsp
                                                                                                                                                                                                                                                                                               44 ThrSerLysMetSerProArgValProGlnGlnAspTrpLeuSerGlnProProAlaArg
                                                               1347
301
58
83
11
                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                  Gaps:
                                                                                                                                                            (1-1347)
/gene="FLI1"
/locus_tag="HCM6709"
                                                                                                                                                            JS-09-902-772-2 (1-451) x AY418895
                                                             9.1e-128
1599.50
79.25%
66.45%
65.45%
                                                                                     Score.
Percent Similarity:
Best Local Similarity:
                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                                                           104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        586
                                                                                                                   Query Match:
DB:
                                                                  No.:
```

6 B 6

8 6 8

8

6 6 6 6 6 6 6 6 6 6

음 중 음

8 8 8

```
GI:25842593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12445392
Contact: Simon Hubbard
                                                                                                                                                                                                                                                                1248 TACTAC 1253
                                                                                                                                                                                                                                         450 TYFTYF 451
                                                                                                                                                                                                                                                                                                                                               BU334592
BU334592.1
           353
                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                       RESULT 11
BU334592
                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                     임
                                                                                                                                                                  a
                            셤
                                                     8
                                                                          B
                                                                                                ð
                                                                                                                                                ð
                                                                                                                                                                                             ò
                                                                                                                                                                                                                                       ઠ
         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnileLeuGlyProThrSer 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTCGCCTAGNNINNINNINAGAAGCGGGCAGATCCAGTGGCCAATTCCTCCTGGAGCTG 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CICTCCGACAGCGCCAACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAA 827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMet 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGACGGACCCCGATGAGGTGGCCAGGCGCTGGGCGAGGCGGAAAAGCAAAGCCAACATG 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIleMetThrLys 352
                                                                                                                                                                          63 GAGTGGATCAANNNN---NCNNNNAGGGTCAACNNNAAGCGG-----GNNNATGACCAC 113
                                                                                                                                                                                                                                173
                                                                                                                                                                                                                                                                             233
                                                                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                                234 CCTCCTCCCAACATGACCACCAACGAGAGAGAGAGTCATCGTCCCCGCAGACCCCACACTG 293
                                                                                                                                                                                                                                                                                                                                                TrpSerThrAspHisValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuPro 153
                                                                                                                                                                                                                                                                                                                                                             294 TGGACACAGGAGCATGTGAGGCAATGGCTGGAGTGGGCCATAAAGGAGTACAGCTTGATG 353
                                                                                                                                                                                                                                                                                                                                                                                              AspValAspIleLeuLeuPheGlnAsnIleAspGlyLysGluLeuCysLysMetThrLys 173
                                                                                                                                                                                                                                                                                                                                                                                                                      413
                                                                                                                                                                                                                                                                                                                                                                                                                                                           213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrserHisserHisProThrGlnSerLysAlaThrGln---ProSerSerSerThrVal 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTAAGAATACAGAGCAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGC 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerArgleuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeu 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuSerAspSerSerAsnSerAsnCyslleThrTrpGluGlyThrAsnGlyGluPheLys 312
                                                                                                                                                                                                                                                       SerSerSerAspAsnValGlyMetAsnTyrGlySerTyrMetGluGluLysHis---Ile 113
                                                                                                                                                                                                                                                                                                                                                                                                                                            AspAspPheGlnArgLeuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHis 193
                                                                                                                                                                                                         94
                                                                                                                                                           74
                                                                                                                                                         AspTrpLeuSerGlnProProAlaArgValThrIleLysMetGluCysAsnProAsnGln
                                                                                                                                                                                                                       TyrieuArgGluArgGlyAlaThrPhellePheProAsnThrSerValTyrProGluAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaSerSerSerGluTyrGlyGlnThrSerLysMetSerProArgValProGlnGln
                                                                                                                                      3 GCCTCGGGGAGTCCNGANTNCGGGCAGCCCCACAAGATCAACCCCCTCCCACCANNNNNG
                                                                                                                                                                                                         ValAsnGlySerArgAsnSerProAspAspCysSerValAlaLysGlyGlyLysMetVal
                                                                                                                                                                                                                                                                            174 GGCGGAGGCGAGTCCAACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCC
                                                                                                                                                                                                                                                                                                  ProProProAsnMetThrThrAsnGluArgArgValleValProAlaAspProThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrGlnArgileThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrp
        1256
270
50
92
10
        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                         US-09-902-772-2 (1-451) x AY418894 (1-1256)
        5.88e-113
1428.00
75.83%
63.98%
58.43%
                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
Alignment Scores:
                                                                                                                35
                                                                                                                                                             55
                                                                                                                                                                                                         75
                                                                                                                                                                                                                                                                                                     114
                                                                                                                                                                                                                                                                                                                                                                                               154
                                                                                                                                                                                                                                                                                                                                                                                                                       354
                                                                                                                                                                                                                                                                                                                                                                                                                                             174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        333
            . No. .
                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                       ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      상임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                   Q
                                                                                                                                                                             g
                                                                                                                                                                                                       à
                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                               \overset{\circ}{\circ}
                                                                                                                                                           ò
```

```
/clone lib="CSEQCHN65"
/note="Organ: whole embryo; Vector: pBluescript II KS(+);
/note="Organ: whole embryo; Vector: pBluescript II KS(+);
Site_1: ECORI; Site_2: Not1; This normalized library was
constructed from 1 million independent clones. cDNA
synthesis was initiated using an oligo(dT) primer, using
methylated C in the first strand synthesis reaction.
Following this first strand reaction, double-stranded cDNA
was blunted, ligated to NotI adapters, digested with
ECORI, size-selected, and cloned into the NotI and ECORI
                                                                                                                                                                                                                                  1067
                                                                                                                                                                                                                                                                                                                                     1188 TACCCCAACCCCAACGTCCCCGCCATCCTAACACCCACGTGCCTTCACACTTAGGCAGC 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bp mRNA linear EST 28-NOV-2002
gallus cDNA clone ChEST418m23 5', mRNA
                                                                                                               948 Grecaceccaaaagararecrracaaarrragacrrccaceccarreccpaeecrcrecae 1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gallus gallus (chicken)
Gallus gallus
Gallus gallus
Bukaryota, Metacoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Bukaryota, Metacoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Phasianinae, Gallus.
1 (Bases I to 726)
Boardman, P.B., Sanz-Ezquerro, J., Overton, I.M., Burt, D.W., Bosch, E.,
Pong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A. and Hubbard, S.J.
Comprehensive Collection of Chicken cDNAs
Curr. Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                  432
                                                                                                                                                                                                                                                                                               412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433 TyrProAsn-----ThrArgLeuProAlaAlaHisMetProSerHisLeuGlyThr 449
                                                      372
AATTACGACAAGCTGAGCCGGCCCTCCGTTATTACTATGATAAAAACATTATGACCAAA
                                                      ValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlylleAlaGlnAlaLeuGln
                                                                                                                                                                               ProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyrMetSerSer
                                                                                                                                                                                                               413 ThrSerSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGly1le
                                                                                                                                                                                                                                                                                                  393 TyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Department of Blomolecular Sciences
University of Manchester Institute of Science and Technology
(UMIST)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"

strain="White Leghorn, Hisex"

/b xred="taxon:9031"

/clone="chass1418m31"

/tissue_type="whole embryo"

/dev stage="10"

/lab_host="DH108"

/clone_lib="CSEQCHN65"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .726
/organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fax: 01612360409
Email: Simon.Hubbard@umist.ac.uk.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PO Box 88, Manchester, M60 1QD,
Tel: 01612008930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          726
603500995F1 CSEQCHN65 Gallus
sequence.
```

```
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
 KEYWORDS
SOURCE
ORGANISM
                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CB269538 1008445 Human Fat Cell 5'-Stretch Plus cDNA Library Homo sapiens cDNA 5', mRNA sequence. CB265938 GB269538 1 GI:28444123
compatible sites of a custom modified MCS of the pBluescript (KG+) vector. The library was normalized in 2 rounds using conditions adapted from Soares et al., PNAS (1994) 91: 9228-9232 and Bonaldo et al., Genome Research 6 (1996): 791, except that a significantly longer reannealing hybridization was used."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProprogluserSerMetTyrLysTyrProSerAspleuProTyrMetSerSerTyrHis 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaHisProGlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSer 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    548 GCACACCCCCAGAAGATGAACTTTGTAGCTCCCCATCCCCTGCTTTGCCCGTAACCTCA 607
                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                AspProAspGluValAlaArgArgTrpGlyGluArgLysSerLysProAsnMetAsnTyr 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsplysheuSerArgAlaLeuArgTyrTyrTyrAsplysAsnIleMetThrLysValHis 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGlnAlaLeuGlnProHis 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      428 GGTAAACGCTATGCCTACAATTTGATTTCCACGGAATCGCTCAGGCCCTCCAGCCTCAC 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            274
                                                                                                                                                                                                                                                                                                          294
                                                                                                                                                                                                                                                                                                                                                                                   AspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThr 314
                                                                                                                                                                                                                                                                                                                                                                                                   SerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThr-GlyGlyIleTyrPr 434
                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                       127
                                                                                                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                        CCTCCAGAATCATCCATGTACAAATACCCATCAGACCTCCCCTACATGAGTTCCTACCAT
                                                                                                                                                                                                                  GAGAGAATAACAACAAGGCCAGATTTACCTTATGAGCAAGCGAGGAGATCAGCGTGGACG
                                                                                                                                                                                                                                                               AGTCACAGGCCATCCCACTCAGTCAAAAGCTACCCCAACCATCATCTTCAACAGTGCCAAAA
                                                                                                                                                                                                                                                                                             ThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSerArg
                                                                                                                                                                                                      215 GlnArgIleThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThr
                                                                                                                                                                                                                                                 SerHisSerHisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLys
                                                                                                                                                                                                                                                                                                                                           LeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oAsnThrArgLeuProAlaAlaHisMetProSerHisLeu-GlyThrTyr 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAATACCAGGCTGCCAGCTGCTCATATGCCTTCCCATCTTTGGCACCTACTAC
                                                                                                   2236
0 236
0 20 0
                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                US-09-902-772-2 (1-451) x BU334592 (1-726)
                                                                                                 4.55e-100
1275.00
99.16%
98.74%
52.17%
                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                          Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                  315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                         308
                                                                                                                                                                                                                            00
                                                                                                                                                                                                                                                    235
                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                               255
                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                             275
                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                              248
                                                                                                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
CB269538
LOCUS
DEFINITION
                                                                                          Alignment S
Pred. No.:
                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CD
                                                                                                                                                                                                                      QΩ
                                                                                                                                                                                                                                                 $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \stackrel{\sim}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                      à
```

ACCESSION VERSION

```
262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                            PORMARD: CTCGGGAAGCGCCCATTGTGTTGGT

BACKWARD: AATACGACTCACTATAGGGCGAATTGG

Seq primer: GTTGGTACCCGGGAATTC.

Location/Qualifiers

1. .709

/organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_xref="tabe"
/db_xref="tabe"
/fissue_type="mRNA"
/fissue_type="MRNA"
/cissue_type="MRNA"
/cissue_lib="funan Fat Cell 5'-Stretch Plus cDNA Library"
/note="Vector: lambdaTriplEx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224 ProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHisProThr---GlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysalaThrGlnProSerSerSerThrValProLysThrGluAspGlnArgProGlnLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    131 AAAGCTGCTCAACCATCTCCTTCCACAGTGCCCAAAACTGAAGACCCAGCGTCCTCAGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       283 IleGlnLeuTrpGlnPheLeuLeuGluLeuLeuSerAspSerSerAsnCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThriringluGlyThrAsnGlyGluPhelysMetThrAspProAspGluValAlaArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TrpG1vG1uArg1ysSeriysProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArgTyrAlaTyrLysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204 PheProAsnThrSerValTyrProGluAlaThrGlnArgIleThrThrArgProAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 TITCCNAATACTICAGTATATCCTGAAGCTACGCAAAGAATAACAACTAGGCCAGATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251 AICCAGCTIIGGGAGTICCTCCTGGAGGTCCTGTCGGACAGCTCCAACTCCAAGCTGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             371 TGGGGAGAGCGGAAGCAAACCCAACATGAACTACGATAAGCTCAGCCGGCGCCCTCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      709
2218
14
14
                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-902-772-2 (1-451) x CB269538 (1-709)
                                                                                                                                                                                                                                                                                                                                                                                                          5.84e-87
1123.50
94.02%
93.16%
45.97%
                                                                                                                                                                                     PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

Db ò a $\stackrel{>}{\circ}$ 음 8 임

```
AKO89900

Mus musculus 12 days embryo spinal ganglion cDNA, RIKEN fill-length enriched library, clone:D130057B15 product:Friend leukemia integration 1, full insert sequence.

AKO83900. G1:26350832

AKO83900. G1:26350832

Mus musculus (house mouse)

Mus musculus (house mouse)

Mus musculus (house couse)

Mus musculus (house couse)

Mus musculus (house mouse)

Mus musculus (house mouse)

Mus musculus (house mouse)

Mus musculus (house mouse)

Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerSerMetTyrLysTyrDroSerAspLeuDroTyrMetSerSerTyrHisAlaHisPro 397
                                                                                                                                        277
                                                                                                                                                                    361
                                                                                                                                                                                                297
                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                             337
                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                  357
                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                        377
                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257
                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new Genome Res. 10 (10), 1617-1630 (2000)
20499374
11042159
                                                                                                             302 CAACGGCCTCAGCCAGATCCCTATCAAATCCTGGGGCCCACTAGTAGTAGTCGTCTTGCCAAT
                                                                                                                                                                                                                  AsnSerAsnCysIleThrTrpGluGlyThrAsnGlyGluPheLysMetThrAspProAsp
                                                                                                                                                                                                                                                                   422 AACGCCAGCTGTATCACATGGGAAGGACCAATGGGGAATTCAAGATGACAGAGATT
                                                                                                                                                                                                                                                                                                              GluValAlaargArgTrpGlyGluArgLysSerLysProAsnMetAsnTyrAspLysLeu
                                                                                                                                                                                                                                                                                                                              SerArgAlaLeuArgTyrTyrAspLysAsnIleMetThrLysValHisGlyLysArg
                                                                                                                                                                                                                                                                                                                                                                                     542 AGCCGAGCCCTTCGATACTACTATGATAAGAACATTATGACCAAGTGCCATGGCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                        TyralaTyriysPheAspPheHisGly1leAlaGlnAlaLeuGlnProHisProProGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnLysMetAsnPheValAlaProHisProProAlaLeuProValThrSerSerPhe
                                                                                   HisProThrGlnSerLysAlaThrGlnProSerSerSerThrValProLysThrGluAsp
                                                                                                                                       GlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerArgLeuAlaAsn
AGTAGCTCACTGCTGGTCTAC---AATACTCCCATCCCACAGAAGCTTCCTCACGTCTT
                                                                                                                                                                                               ProGlySerGlyClnIleGlnLeuTrpGlnPheLeuLeuGluLeuSerAspSerSer
                             ThrThrArgProAspLeuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PheAlaAlaProAsnProTyrTrpAsnSerProThrGlyGlyIle 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
9927953
                                                           GCCACCAAAGAAGGTCCTCCTGTT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
                                                                                                                                                                                                                                362
                                                                                                                                                                                                                                                          298
                                                                                                                                                                                                                                                                                                                   318
                                                                                                                                                                                                                                                                                                                                                                                                                             358
                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          782
                                                                                         238
                                                                                                                                                                                                   278
                                                                                                                                                                                                                                                                                                                                                                        338
                                  218
                                                                                                                                              258
       185
                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
AK083900
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                     엄
                                                                                ઠે
                                                                                                               g
                                                                                                                                     ò
                                                                                                                                                                 a
                                                                                                                                                                                               à
                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                             ò
                                                                                                                                                                                                                                                                                                                             EST.

Gallus gallus (chicken)

Gallus gallus

Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,

Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,

Buestoda, Aves; Neognathae, Galliformes; Phasianidae;

Phasianinae, Gallus.

El (Bases I to 827)

Buestedde, J.M.

Gallus gallus bursal lymphocyte EST

Unpublished (2002)

Contact: Buerstedde JM

Cellular Immunology

Heinrich-Pette-Institute

Martinistr. 52, 20251 Hamburg, Germany

Martinistr. 52, 20251 Hamburg, Germany

Martinistr. 52, 20251 Hamburg, Location/Qualifiers
                                                                                                                                                                                                                                                             EST 22-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ArgleuThrProSerTyrAsnAlaAspIleLeuLeuSerHisLeuHisTyrLeuArgGlu 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgGlyAlaThrPheIlePheProAsnThrSerValTyrProGluAlaThrGlnArgIle 217 ::: |||||||:: ||||:::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisValArgGlnTrpLeuGluTrpAlaValLysGluTyrGlyLeuProAspValAsplle 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Leureupheginasnileaspgiyrysgiureucystysmetthrtysaspapphegin 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              402
                                                                                         609
                                                                                                                  550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491 GACTICCACGGGATCGCCCAGGCCTCCAGCCCCACCCCCCGGAGTCATCTCTGTACAAG
                                                                              AspPheHisGlyIleAlaGlnAlaLeuGlnProHisProProGluSerSerMetTyrLys
                                                               TyrProSerAspLeuProTyrMetSerSerTyrHisAlaHisProGInLysMetAsnPhe
                                                                                                                                                                                                                                                             bp mRNA linear EST 22-APR. cDNA clone 8m13r2, mRNA sequence
                                                                                                                                                                          ProTyrTrpAsnSerProThrGlyGlylleTyrProAsnThr 436
                                                                                                                                                                                         827
211
20
43
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cell_type="bursal lymphocyte"
/dev_stage="2-3 weeks old"
/clone_lib="riken!"
/note="CB inbred strain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A4456498 rikeni Gallus gallus .
A456498 A456498
A456498.1 GI:20266594
EAT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-902-772-2 (1-451) x AJ456498 (1-827)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.01e-86
1118.50
78.318
71.538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ເດ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198
          363
                                                               383
                                                                                                                                                                             423
                                                                                                                                                                                                        899
                                                                                                                                                                                                                              AJ456498
LOCUS
                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
```

gg

ò

g

ò

g

ò

 δ

```
430 GlyGlyIleTyrProAsn-----ThrArgLeuProAlaAlaHisMetProSerHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                          (1-2420)
                                                                                                                                                                                                                                                                                                                                                                          US-09-902-772-2 (1-451) x AK083900
                                                                                                                                                                                                   3.326-80
1055.00
80.00%
68.77%
                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                   Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                657
                                                                                                                                                                                                                                                                                                                                                                                                                          171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 상 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Group Phase Is II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Mature 420, 563-573 (2002)

G (bo,770 full-length cDNAs

Nature 420, 563-573 (2002)

G (boases I to 2420)

G (boases I to 2420)

Fukuda, S., Furuno, M., Haramoto, K., Hiracka, T., Hirozane, T., Hayashida, K., Hayastu, N., Haramoto, K., Hiramota, T., Haramota, T., Haramota, T., Haramota, T., Haramota, T., Haramota, T., Haramota, T., Koya, S., Kunin, H., Kawai, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakawira, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Ohacto, N., Okazaki, J., Matsuyama, T., Mayazaki, A., Murata, M., Nishi, K., Nomura, K., Shinagawa, H., Sakai, K., Sakai, K., Satoh, H., Sakai, K., Sakai, K., Satoh, H., Sakai, K., Sakai, K., Satoh, M., Sakai, K., Sakai, K., Satoh, M., Sakai, K., Sakai, K., Satoh, M., Andhira, S., Takeda, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Muramateu, M. and Hayashizaki, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muramateu, M. and Hayashizaki, Y. Direct Submission Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute, J.-Tasahashi, F., Sutumirik, W., Yokohama Institute, J.-Tasahashi, F., Sutumirik, W., Yokohama Institute, J.-Tasahashi, F., Sutumirik, W., Yokohama Institute, J.-Tasahashi, F., Sutumirik, M., Yokohama Institute, J.-Tasahashi, F., Sutumirik, J., Sutumirik, J., Sutumirik, J., Sutumirik, J., Jasahashi, J., Hayashizaki, J., Jasahashi, Jasahashi, Jasahashi, Jasahashi, J., Jasahashi, Jasah
               Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Sumi, N., Ishii, Y., Nakamuro, S., Hazama, M., Nishine, T., Harada, R., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yonacaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA library
                                                                                                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                 The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="unnamed protein product; Friend leukemia
integration 1 (MGD|MGI:95554, GB|NM_008026, evidence:
BLASIN, 99%, match=1671)
                                                                                                                                                                                                                                                                                                                                 The RIKEN Genome Exploration Research Group Phase II Team and
                                                                                                                                                                                                                                                                                                                                                      FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection
Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="spinal ganglion"
/clone lib=mRKEN full-length enriched mouse
/dev_stage="12 days embryo"
11 .884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Please visit our web site for further details. URL: http://genome.gsc.riken.go.jp/.URL: http://fantom.gsc.riken.go.jp/.Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (db_xref="FANTOM DB:D130057B15"

/db_xref="MG1:4419883"

(db_xref="taxon:10090"

/clone="D130057B15"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=3
/protein_id="BAC39053.1"
/db_xref="GI:26350833"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            putative"
                                                                                                                                                                                                                                                                                    11076861
                                                                                                                                                                                                                                                        MEDLINE
                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
```

/translation="MNKEDFLRATSAYNTEVLLSHLSYLKESSLLAYNTTSHTDQSSR LNVKEDPSYDSVRRGAMNNNMNSGLNKSPLLGGSQTMGKNTEQRPQPDPYQILGPTS RLANPGSGQIQLMQFLLELLSDSANSCITWEGTNGBFKMTDPDEVARRWGERKSKPN MPSYHAHOQKVNFVPSHPSSMPVTSSSFFGAASQYMTSPTAGIYPNFSVPSPISY SHLGSYY

349 HisLeuHisTyrLeuArgGluArgGlyAlaThrPhellePheProAsnThrSerValTyr 210 249 296 289 356 309 416 329 476 536 369 596 389 959 409 716 176 236 62 ProThrSerSerArgLeuAlaAsnProGlySerGlyGln11eGlnLeuTrpGlnPheLeu ProAsnMetAsnTyrAspLysLeuSerArgAlaLeuArgTyrTyrTyrAspLysAsnIle MetThrLysAspAspPheGlnArgLeuThrProSerTyrAsnAlaAspIleLeuLeuSer 3 ATGAACAAGAAGTTCCTCCGAGCCACCTCCGCCTACAACAAAGAAGTGCTGTTGTCG caccicagriaccicadedaa.---agricacregecciaraacacaacciccar ::: ::: ||||::: acagaccagtcctcacgactgaatgtcaaggaagacccttcttatgactctgtcaggaga SerThrValProLysThrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGly LeuGluLeuLeuSerAspSerSerAsnSerAsnCysIleThrTrpGluGlyThrAsnGly GluPheLysMetThrAspProAspGluValAlaArgArgTrpGlyGluArgLysSerLys MetThrLysValHisGlyLysArgTyrAlaTyrLysPheAspPheHisGlyIleAlaGln Argaccaaagrecargecaaaggrargecracaagrrrgacriccargecarreccag AlaLeuGlnProHisProProGluSerSerMetTyrLysTyrProSerAspLeuProTyr MetSerSerTyrHisAlaHisProGlnLysMetAsnPheValAlaProHisProProAla LeuProValThrSerSerPhePheAlaAlaProAsnProTyrTrpAsnSerProThr 211 ProGluAlaThrGlnArgIleThrThrArgProAspLeuProTyrGluGlnAlaArgArg 231 SeralaTrpThrSerHisSerHisProThrGlnSerLysAla---ThrGlnProSerSer 2420 196 32 51 51 Length:
Matches:
Conservative:
Mismatches:
Indels:

446

```
790
                          g
                                                                                     g
                                                                                                                       ò
                                                                                                                                                   g
                                                                                                                                                                              ò
                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                          à
                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 1045)

2. NIH-MGC http://mgc.nci.nih.gov/.

3. NIH-MGC http://mgc.nci.nih.gov/.

3. Dupublished (1999)

3. Contact: Robert Strausberg, Ph.D.

5. Email: cgapbs-remail.nih.gov

7. Tissue Procurement: ATCC

5. CDNA Library Preparation: Life Technologies, Inc.

5. CDNA Library Preparation: Life Technologies, Inc.

5. CDNA Library Preparation: Life Technologies, Inc.

5. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

5. DNA Sequencing by: Agencourt Bioscience Corporation

6. CDNA Library Arrayed by: The I.M.A.G.E. Consortium/LLNL at:

6. CDNA Library Preparation: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

6. Http://mage.lln.gov

7. Plate: LLAM12347 row: f column: 10

7. High quality sequence stop: 669.

8. Location/Qualifiers
                                                                   AGENCOLY 6404041 NIH MGC_92 Homo sapiens cDNA clone IMAGE:5583753 S/ mENA Sequence.

BM456833.1 GI:18505873
BM456833.1 GI:18505873
BM900 sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/mol_type="mRNA"
/clone="taxon:9606"
/tissue_type="embryonal carcinoma, cell line"
/tish bock="DH10B (phage-resistant)"
/clone_lib="NIH MGC 92"
/note="Corgan: testis; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 2: Skb. Library enriched for
full:length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27 HisheualaLysThrGluMetThrAlaSerSerSerSerGluTyrGlyGlnThrSerLys 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysMetGluCysAsnProAsnGlnValAsnGlySerArgAsnSerProAspAspCysSer 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 GluhlaLeuSerValValSerGluhspGlnSerLeuPheGluCysAlaTyrGlySerPro 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-902-772-2 (1-451) x BM456833 (1-1045)
 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.82e-79
1040.00
75.24%
69.71%
                    837 TTAGGCAGCTACTAC 851
447 LeuGlyThrTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                              RESULT 15
BM456833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
146
                                                                                                                                                                                                                           147 VallysGluTyrGlyLeuProAspValAspIleLeuheuPheGlnAsnIleAspGlyLys 166
                                                                                                                                                                                                                                                                    699
                                                                                                                                                                                                                                                                                                          186
                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222 ------AspleuProTyrGluGlnAlaArgArgSerAlaTrpThrSerHisSerHis 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254 LysthrGluAspGlnArgProGlnLeuAspProTyrGlnIleLeuGlyProThrSerSer 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               293
                                                                        126
                                                                                                           549
                                                                                                                                                                                          609
                                                                                                                                                                                                                                                                                                                                                                                                                         789
                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            834 AGAAACACCGATTTACCATATGGACCCCCCCGGAGATCAGCCTGGACCGGTCACGGTCAA 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----TTAATCACAATCCTT 998
                                                                                                                                                                         610 GTGAAAGAATATGGCCTTCCAGACGTCAACATCTTGTTATTCCAGAACATCGATGGGAAG
                                                                                                                                                                                                                                                                                                          167 GluLeuCysLysMetThrLysAspAspPheGlnArgLeuThrProSerTyrAsnAlaAsp
                                                                                                                                                                                                                                                                                                                                                                                  187 IleLeuLeuSerHisLeuHisTyrLeuArgGluArgGlyAlaThrPheIlePheProAsn
                                                                                                                                                                                                                                                                                                                                                                                                             239 ProThrGlnSerLysAlaThrGlnProSerSerSerThrVal-------Pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               274 ArgLeuAlaAsnProGlySerGlyGlnIleGlnLeuTrpGlnPheLeuLeuGluLeuLeu
87 ValAlaLysGlyGlyLysMetValSerSerAspAsnValGlyMetAsnTyrGlySer
                                                                        107 TyrMetGluGluLysHisIleProProProProAsnMetThrThrAsnGluArgArgValIle
                                                                                                                                                     127 ValProAlaAspProThrLeuTrpSerThrAspHisValArgGlnTrpLeuGluTrpAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----GGCCCCTCAGGT---
                      207 ThrSerValTyrProGluAlaThrGlnArgIleThrThrArgPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            945 AAAACTGAA-----AGACCCAGC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Search completed: May 27, 2004, 23:56:42 Job time : 3667 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGAACCCCACAATATAAAC 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          975 -----TAAATCCC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  294 SerAspSerSerAsnSerAsn 300
```